STIC Search

Inventor Search

LUCAS 09/991,363

```
=> d his

     (FILE 'HOME' ENTERED AT 11:45:17 ON 09 OCT 2003)

     FILE 'HCAPLUS' ENTERED AT 11:45:32 ON 09 OCT 2003
L1          141 S DUKE R?/AU
L2           40 S BELLGRAU D?/AU
L3           39 S FRANZUSOFF A?/AU
L4         3308 S WILSON C?/AU
L5         3505 S L1-4
L6           18 S L5 AND ?DENDRITIC
L7            4 S L6 AND YEAST
L8            3 S L7 NOT MICROARRAY/TI  3 citations

=> d ibib abs hitstr ind 1-3

L8   ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:        2002:391468  HCAPLUS
DOCUMENT NUMBER:         136:400584
TITLE:                   Vaccines comprising dendritic cells and
                         antigen-expressing yeast
INVENTOR(S):             Duke, Richard C.; Bellgrau, Donald
                         ; Franzusoff, Alex; Wilson, Cara C.
PATENT ASSIGNEE(S):      Globe Immune, Inc., USA; University Technology Corp.
SOURCE:                  PCT Int. Appl., 68 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.       KIND  DATE           APPLICATION NO.  DATE
     ---------------  ----  --------       ---------------  --------
     WO 2002039951     A2   20020523       WO 2001-US43537  20011115
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
             RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2002025681     A5   20020527       AU 2002-25681    20011115
PRIORITY APPLN. INFO.:                    US 2000-249173P  P  20001115
                                          WO 2001-US43537  W  20011115
AB   Disclosed is a vaccine that includes a dendritic cell loaded
     with a yeast vehicle and antigen.  The non-pathogenic
     yeast is loaded with nucleic acid encoding desired antigen of
     virus, bacteria, fungus, parasite, protozoan, tumor, etc.  Also disclosed
     are methods of making the vaccine and using the vaccine to elicit cellular
     and humoral immune responses in a mammal.  Addnl., a method to elicit an
     immune response by administration of a yeast vehicle and an
     antigen that is not complexed to the yeast vehicle is disclosed.
IC   ICM  A61K
CC   15-2 (Immunochemistry)
     Section cross-reference(s): 3, 9, 63
ST   vaccine dendritic cell yeast antigen
IT   Freezing
        (-thawing; vaccines comprising dendritic cells and
        antigen-expressing yeast)
IT   Vaccines
        (AIDS; vaccines comprising dendritic cells and
        antigen-expressing yeast)
IT   Proteins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
```

(E6, HPV; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)

IT Proteins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(E7, HPV; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)

IT Envelope proteins
gag proteins
nef protein
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(HIV-1; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)

IT Toxins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anthrax protective antigen; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)

IT Nucleic acids
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antigen-encoding; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)

IT Animal virus
Bacteria (Eubacteria)
Fungi
Parasitic worm
Protozoa
(antigen; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)

IT Sonication
(bath; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)

IT Immunity
(cell-mediated; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)

IT Chemistry
(chem. compds., biol. response modifier; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)

IT Cytoplasm
(cytoplast, **yeast**; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)

IT Biological transport
Liposomes
(diffusion; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)

IT Parasite
(ecto-, antigen; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)

IT Glycoproteins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gD, HSV; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)

IT Antigens
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hepatitis B core; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)

IT Antigens
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hepatitis B surface; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)

IT Immunity
(humoral; vaccines comprising **dendritic** cells and

antigen-expressing yeast)
IT Drug delivery systems
(inhalants; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Drug delivery systems
(injections, i.m.; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Drug delivery systems
(injections, i.p.; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Drug delivery systems
(injections, i.v.; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Drug delivery systems
(injections, s.c.; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Drug delivery systems
(intraarticular; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Drug delivery systems
(intracranial; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Drug delivery systems
(intradermal; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Drug delivery systems
(intranodal; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Drug delivery systems
(intraspinal; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Drug delivery systems
(liposomes, diffusion; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Animal cell
(mammalian, antigen; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Drug delivery systems
(nasal, intra-; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Drug delivery systems
(ophthalmic, intra-; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Drug delivery systems
(oral; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Polyproteins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pol, HIV-1; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Antigens
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(surface; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Transcription factors
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tat, HIV-1; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Drug delivery systems
(transdermal; vaccines comprising dendritic cells and antigen-expressing yeast)
IT Antigens
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(tumor-assocd.; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)
IT Vaccines
(tumor; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)
IT Bacillus anthracis
Biological transport
Candida
Cryptococcus (fungus)
Dendritic cell
Electroporation
Hansenula
Human herpesvirus
Human immunodeficiency virus 1
Human papillomavirus
Kluyveromyces
Mammalia
Phagocytosis
Pichia
Rhodotorula
Saccharomyces
Schizosaccharomyces
Vaccines
Yarrowia
Yeast
(vaccines comprising **dendritic** cells and antigen-expressing **yeast**)
IT Antigens
Ovalbumin
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vaccines comprising **dendritic** cells and antigen-expressing **yeast**)
IT Anti-AIDS agents
Antitumor agents
(vaccines; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)
IT Cell membrane
(**yeast** ghost; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)
IT Organelle
(**yeast** subcellular particle; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)
IT Protoplast and Spheroplast
(**yeast**; vaccines comprising **dendritic** cells and antigen-expressing **yeast**)
IT 138831-86-4
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vaccines comprising **dendritic** cells and antigen-expressing **yeast**)

L8 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:342796 HCAPLUS
DOCUMENT NUMBER: 135:120914
TITLE: Whole recombinant **yeast** vaccine activates **dendritic** cells and elicits protective cell-mediated immunity
AUTHOR(S): Stubbs, Andrew C.; Martin, Kathleen S.; Coeshott, Claire; Skaates, Serena V.; Kuritzkes, Daniel R.; **Bellgrau, Donald**; **Franzusoff, Alex**; **Duke, Richard C.**; **Wilson, Cara C.**
CORPORATE SOURCE: Department of Medicine, University of Colorado Health Sciences Center, Denver, CO, USA
SOURCE: Nature Medicine (New York, NY, United States) (2001), 7(5), 625-630
CODEN: NAMEFI; ISSN: 1078-8956

PUBLISHER: Nature America Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB There is currently a need for vaccines that stimulate cell-mediated immunity-particularly that mediated by CD8+ cytotoxic T lymphocytes (CTLs)-against viral and tumor antigens. The optimal induction of cell-mediated immunity requires the presentation of antigens by specialized cells of the immune system called **dendritic** cells (DCs). DCs are unique in their ability to process exogenous antigens via the major histocompatibility complex (MHC) class I pathway as well as in their ability to activate naive, antigen-specific CD8+ and CD4+ T cells. Vaccine strategies that target or activate DCs in order to elicit potent CTL-mediated immunity are the subject of intense research. We report here that whole recombinant Saccharomyces cerevisiae **yeast** expressing tumor or HIV-1 antigens potently induced antigen-specific, CTL responses, including those mediating tumor protection, in vaccinated animals. Interactions between **yeast** and DCs led to DC maturation, IL-12 prodn. and the efficient priming of MHC class I- and class II-restricted, antigen-specific T-cell responses. **Yeast** exerted a strong adjuvant effect, augmenting DC presentation of exogenous whole-protein antigen to MHC class I- and class II-restricted T cells. Recombinant **yeast** represent a novel vaccine strategy for the induction of broad-based cellular immune responses.

CC 15-2 (Immunochemistry)

ST **yeast** vaccine tumor HIV1 antigen **dendritic** cell CTL

IT Histocompatibility antigens
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MHC (major histocompatibility complex), class I; whole recombinant **yeast** vaccine expressing tumor or HIV-1 antigens activated **dendritic** cells and induced protective CTL responses in relation to)

IT Histocompatibility antigens
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MHC (major histocompatibility complex), class II; whole recombinant **yeast** vaccine expressing tumor or HIV-1 antigens activated **dendritic** cells and induced protective CTL responses in relation to)

IT Immunity
(cell-mediated; whole recombinant **yeast** vaccine expressing tumor or HIV-1 antigens activated **dendritic** cells and induced protective CTL responses)

IT T cell (lymphocyte)
(cytotoxic; whole recombinant **yeast** vaccine expressing tumor or HIV-1 antigens activated **dendritic** cells and induced protective CTL responses)

IT Envelope proteins
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(gp120env; whole recombinant **yeast** vaccine expressing tumor or HIV-1 antigens activated **dendritic** cells and induced protective CTL responses)

IT Envelope proteins
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(gp160env; whole recombinant **yeast** vaccine expressing tumor or HIV-1 antigens activated **dendritic** cells and induced protective CTL responses)

IT Antigens
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(tumor-assocd.; whole recombinant **yeast** vaccine expressing tumor or HIV-1 antigens activated **dendritic** cells and induced protective CTL responses)

IT AIDS (disease)
Anti-AIDS agents

Antitumor agents
CD4-positive T cell
CD8-positive T cell
Dendritic cell
Human immunodeficiency virus 1
Saccharomyces cerevisiae
Vaccines
(whole recombinant **yeast** vaccine expressing tumor or HIV-1 antigens activated **dendritic** cells and induced protective CTL responses)

IT Interleukin 12
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(whole recombinant **yeast** vaccine expressing tumor or HIV-1 antigens activated **dendritic** cells and induced protective CTL responses in relation to)

IT Immunostimulants
(**yeast**; whole recombinant **yeast** exerting a strong adjuvant effect)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1996:446736 HCAPLUS
DOCUMENT NUMBER: 125:76427
TITLE: **Yeast**-based delivery vehicles for protection from disease
INVENTOR(S): **Duke, Richard C.**; **Franzusoff, Alex** ; **Bellgrau, Donald**
PATENT ASSIGNEE(S): Regents of the University of Colorado, USA
SOURCE: PCT Int. Appl., 107 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9614876	A1	19960523	WO 1995-US14881	19951115
W: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5830463	A	19981103	US 1994-340185	19941115
AU 9642835	A1	19960606	AU 1996-42835	19951115
EP 789593	A1	19970820	EP 1995-941401	19951115
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 10510246	T2	19981006	JP 1995-516320	19951115

PRIORITY APPLN. INFO.: US 1994-340185 19941115
US 1993-88322 19930707
WO 1995-US14881 19951115

AB The present invention includes **yeast** vehicles and their use as delivery vehicles. **Yeast** vehicles include a **yeast** portion and a heterologous compd. Such **yeast** vehicles can be used to protect animals or plants from disease and to otherwise carry compds. to given cell types. Examples of **yeast** vehicles include gene delivery vehicles, drug delivery vehicles, and immunomodulatory vehicles. Immunomodulatory vehicles are capable of modulating an immune response. When stimulating an immune response, such **yeast** vehicles effect cell-mediated as well as humoral immunity. **Yeast** vehicle prodn. is described, as are demonstration of immunostimulating (cell-mediated and humoral) activity and **yeast** vehicle safety.

IC ICM A61K048-00

ICS C12N015-00
CC 1-12 (Pharmacology)
Section cross-reference(s): 11, 63
ST yeast delivery vehicle therapeutic animal plant; drug immunomodulator yeast delivery vehicle
IT Vaccines
(Macaque monkey vaccination; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Bacteria
Fungi
Neoplasm
Parasitic worm
Protozoa
Virus
(antigens; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Connective tissue
Epithelium
(cell; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Gene
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(defective, compds. replacing; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Transcription, genetic
Translation, genetic
(inhibitors; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Receptors
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ligands; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Animal cell
(mammalian cell-surface mols.; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Primate
Rodent
(method to test yeast vehicle to elicit protective immune response against disease)
IT Membrane, biological
(particles; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Inorganic compounds
Organic compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(protective; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Transplant and Transplantation
(rejection; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Macaca
(vaccination of; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Allergy inhibitors
Anemia (disease)
Animal tissue culture
Anthelmintics
Anti-infective agents
Arthropod
Autoimmune disease
Bactericides, Disinfectants, and Antiseptics
Candida
Candida albicans
Cardiovascular agents
Cryptococcus (fungus)
Cytotoxic agents
Fungicides and Fungistats

Fusion, biological
Hansenula
Immunodeficiency
Immunomodulators
Immunostimulants
Immunosuppressants
Inflammation inhibitors
Kluyveromyces
Lymphocyte
Monocyte
Myoblast
Neoplasm inhibitors
Nerve
Neutrophil
Pharmaceuticals
Pichia
Pichia angusta
Pichia pastoris
Plant
Plant tissue culture
Prion
Protoplast and Spheroplast
Protozoacides
Rhodotorula
Saccharomyces
Saccharomyces cerevisiae
Schizosaccharomyces
Schizosaccharomyces pombe
Therapeutics
Viroid
Virucides and Virustats
Yarrowia
Yeast
(**yeast**-based delivery vehicles for protection of plants and animals from disease)

IT Antibodies
Antigens
Carbohydrates and Sugars, biological studies
Lipids, biological studies
Nucleic acids
Peptides, biological studies
Proteins, biological studies
Ribonucleic acids
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**yeast**-based delivery vehicles for protection of plants and animals from disease)

IT Lymphocyte
(B-cell, **yeast**-based delivery vehicles for protection of plants and animals from disease)

IT Antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(CD4, cells expressing; **yeast**-based delivery vehicles for protection of plants and animals from disease)

IT Antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(CD8, cells expressing; **yeast**-based delivery vehicles for protection of plants and animals from disease)

IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Fas ligand, **yeast**-based delivery vehicles for protection of plants and animals from disease)

IT Lymphocyte
(T-cell, **yeast**-based delivery vehicles for protection of plants and animals from disease)

IT Plant
(angiospermous, **yeast**-based delivery vehicles for protection of plants and animals from disease)

IT Immunity
(cell-mediated, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Cytoplasm
(cytoplast, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Leukocyte
(dendritic cell, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Hematopoiesis
(disorder, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Parasite
(ecto-, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Blood vessel
(endothelium, cell; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Muscle
(fiber, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Disease
(genetic, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Therapeutics
(geno-, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Glycoproteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(gp160env, HIV, heterologous nucleic acid encoding; method to test yeast vehicle to elicit protective immune response against disease)
IT Leukocyte
(granulocyte, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Liver
(hepatocyte, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Virus, animal
(human immunodeficiency, gp160, heterologous nucleic acid encoding; method to test yeast vehicle to elicit protective immune response against disease)
IT Immunity
(humoral, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Disease
(immunoproliferative, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Nucleotides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligo-, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Lung
(pneumonocyte, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Hematopoietic precursor cell
(stem, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Thymus gland
(thymocyte, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Animal
(vertebrate, yeast-based delivery vehicles for protection of plants and animals from disease)
IT 9001-92-7, Endoprotease
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(yeast strain deficient in; yeast-based delivery

vehicles for protection of plants and animals from disease)

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=> file medline
FILE 'MEDLINE' ENTERED AT 17:56:40 ON 09 OCT 2003

 FILE LAST UPDATED: 8 OCT 2003 (20031008/UP).  FILE COVERS 1958 TO DATE.

 On April 13, 2003, MEDLINE was reloaded.  See HELP RLOAD for details.

 MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
 MeSH 2003 vocabulary.  See http://www.nlm.nih.gov/mesh/changes2003.html
 for a description on changes.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> d que l11

L1        18176 SEA FILE=MEDLINE ABB=ON  PLU=ON  ANTIGEN-PRESENTING CELLS+NT/CT

L2        91704 SEA FILE=MEDLINE ABB=ON  PLU=ON  YEASTS+NT/CT
L4         5419 SEA FILE=MEDLINE ABB=ON  PLU=ON  ANTIGEN PRESENTATION/CT
L9           58 SEA FILE=MEDLINE ABB=ON  PLU=ON  L1 AND L2
L11           4 SEA FILE=MEDLINE ABB=ON  PLU=ON  L9 AND L4

=> d que l20

L1        18176 SEA FILE=MEDLINE ABB=ON  PLU=ON  ANTIGEN-PRESENTING CELLS+NT/CT

L2        91704 SEA FILE=MEDLINE ABB=ON  PLU=ON  YEASTS+NT/CT
L3       537607 SEA FILE=MEDLINE ABB=ON  PLU=ON  ANTIGENS+NT/CT
L9           58 SEA FILE=MEDLINE ABB=ON  PLU=ON  L1 AND L2
L10          34 SEA FILE=MEDLINE ABB=ON  PLU=ON  L9 AND L3
L18       44488 SEA FILE=MEDLINE ABB=ON  PLU=ON  ENDOCYTOSIS+NT/CT
L19          10 SEA FILE=MEDLINE ABB=ON  PLU=ON  L10 AND L18
L20           4 SEA FILE=MEDLINE ABB=ON  PLU=ON  L19 AND (MAC-DC OR PORCINE OR
                 PLASTICITY OR LANGERHANS)/TI

=> d que l27

L1        18176 SEA FILE=MEDLINE ABB=ON  PLU=ON  ANTIGEN-PRESENTING CELLS+NT/CT

L2        91704 SEA FILE=MEDLINE ABB=ON  PLU=ON  YEASTS+NT/CT
L4         5419 SEA FILE=MEDLINE ABB=ON  PLU=ON  ANTIGEN PRESENTATION/CT
L5         2545 SEA FILE=MEDLINE ABB=ON  PLU=ON  VACCINES, DNA/CT
L8        18873 SEA FILE=MEDLINE ABB=ON  PLU=ON  ADJUVANTS, IMMUNOLOGIC/CT
L27           4 SEA FILE=MEDLINE ABB=ON  PLU=ON  L1 AND L2 AND ((L4 OR L5) OR
                 L8)

=> d que l37

L29         222 SEA FILE=MEDLINE ABB=ON  PLU=ON  (ANTIGEN-PRESENTING OR
                 DENDRITI? OR APL) AND (YEAST OR SACCHAROMYC? OR CANDIDA OR
                 CRYPTOCOC? OR HANSENULA OR KLUYVERO? OR PICHIA OR PHODOTORULA
                 OR YARROWIA OR SCHIZOSACCHAROMYC?)
L30         152 SEA FILE=MEDLINE ABB=ON  PLU=ON  L29 AND ANTIGEN?
L36          26 SEA FILE=MEDLINE ABB=ON  PLU=ON  L30 AND (FUSE# OR FUSION OR
                 FUSING OR ENTRAP? OR TRAP? OR INTERNALI? OR ENDOCYTO? OR
                 PHAOGCYTOS?)
L37          10 SEA FILE=MEDLINE ABB=ON  PLU=ON  L36 AND DENDRIT?

=> d que l55

L1        18176 SEA FILE=MEDLINE ABB=ON  PLU=ON  ANTIGEN-PRESENTING CELLS+NT/CT
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CT = controlled terminology

NT = narrower term

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L46      135129 SEA FILE=MEDLINE ABB=ON  PLU=ON  YEAST OR SACCHAROMYC? OR
                CANDIDA OR CRYPTOCOC? OR HANSENULA OR KLUYVERO? OR PICHIA OR
                PHODOTORULA OR YARROWIA OR SCHIZOSACCHAROMYC?
L50        3068 SEA FILE=MEDLINE ABB=ON  PLU=ON  L46 (10A) (FUSE# OR FUSION OR
                FUSING OR ENTRAP? OR TRAP? OR INTERNALI? OR ENDOCYTO? OR
                PHAGOCYT?)
L54          21 SEA FILE=MEDLINE ABB=ON  PLU=ON  L50 AND L1
L55           3 SEA FILE=MEDLINE ABB=ON  PLU=ON  L54 AND (MONOCYTE-DERIVED OR
                LIPOSOME-MEDIATED OR MAC-DC)/TI


=> s l11 or l20 or l27 or l37 or l55

L196         15 L11 OR L20 OR L27 OR L37 OR L55   15 cites total for medline

=> file drugu

FILE 'DRUGU' ENTERED AT 17:56:44 ON 09 OCT 2003
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FILE LAST UPDATED: 2 OCT 2003       <20031002/UP>
>>>  DERWENT DRUG FILE (SUBSCRIBER)  <<<

>>>  SDI'S MAY BE RUN WEEKLY OR MONTHLY AS OF JUNE 2001.  <<<
>>>  (WEEKLY IS THE DEFAULT). FOR PRICING INFORMATION     <<<
>>>  SEE HELP COST                                        <<<

>>>  FILE COVERS 1983 TO DATE  <<<
>>>  THESAURUS AVAILABLE IN /CT  <<<


=> d que l64

L58         2998 SEA FILE=DRUGU ABB=ON  PLU=ON  (ANTIGEN-PRESENTING OR DENDRITI?
                 OR APL)
L59        16785 SEA FILE=DRUGU ABB=ON  PLU=ON  YEAST OR SACCHAROMYC? OR
                CANDIDA OR CRYPTOCOC? OR HANSENULA OR KLUYVERO? OR PICHIA OR
                PHODOTORULA OR YARROWIA OR SCHIZOSACCHAROMYC?
L61           37 SEA FILE=DRUGU ABB=ON  PLU=ON  L58 AND L59
L62          104 SEA FILE=DRUGU ABB=ON  PLU=ON  L58 (10A) (FUSE# OR FUSION OR
                FUSING OR ENTRAP? OR TRAP? OR INTERNALI? OR ENDOCYTO? OR
                PHAGOCYT?)
L63            2 SEA FILE=DRUGU ABB=ON  PLU=ON  L61 AND L62
L64            1 SEA FILE=DRUGU ABB=ON  PLU=ON  L63 AND CYTOLYTIC/TI   1 cite for Drugu


=> file embase

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 FILE COVERS 1974 TO 9 Oct 2003 (20031009/ED)

 EMBASE has been reloaded. Enter HELP RLOAD for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> d que l92

L69         39784 SEA FILE=EMBASE ABB=ON  PLU=ON  (ANTIGEN-PRESENTING OR
                DENDRITI? OR APC)
L70        111371 SEA FILE=EMBASE ABB=ON  PLU=ON  YEAST OR SACCHAROMYC? OR
                CANDIDA OR CRYPTOCOC? OR HANSENULA OR KLUYVERO? OR PICHIA OR
                PHODOTORULA OR YARROWIA OR SCHIZOSACCHAROMYC?
L75         10087 SEA FILE=EMBASE ABB=ON  PLU=ON  ANTIGEN PRESENTATION/CT
L82          3837 SEA FILE=EMBASE ABB=ON  PLU=ON  L75/MAJ
```

```
L83          32 SEA FILE=EMBASE ABB=ON  PLU=ON  L82 AND L70
L84          19 SEA FILE=EMBASE ABB=ON  PLU=ON  L69 AND L83
L91        5518 SEA FILE=EMBASE ABB=ON  PLU=ON  VIRUS PARTICLE/CT
L92           1 SEA FILE=EMBASE ABB=ON  PLU=ON  L84 AND L91
```

1 cite for Embase

```
=> file hcaplus

FILE 'HCAPLUS' ENTERED AT 17:56:47 ON 09 OCT 2003
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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```



```
FILE COVERS 1907 - 9 Oct 2003  VOL 139 ISS 15
FILE LAST UPDATED: 8 Oct 2003  (20031008/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.
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PFT = old, new?
"used for" terms

```
=> d que l114

L102(     44711)SEA FILE=HCAPLUS ABB=ON  PLU=ON  YEAST+PFT/CT
L103(      2901)SEA FILE=HCAPLUS ABB=ON  PLU=ON  KLUYVEROMYCES+PFT,NT/CT
L104(       736)SEA FILE=HCAPLUS ABB=ON  PLU=ON  HANSENULA+PFT,NT/CT
L105(      3168)SEA FILE=HCAPLUS ABB=ON  PLU=ON  PICHIA+PFT,NT/CT
L106(     56926)SEA FILE=HCAPLUS ABB=ON  PLU=ON  SACCHAROMYCES+PFT,NT/CT
L107(      5125)SEA FILE=HCAPLUS ABB=ON  PLU=ON  SCHIZOSACCHAROMYCES+PFT,NT/CT

L108(     21782)SEA FILE=HCAPLUS ABB=ON  PLU=ON  CANDIDA+PFT,NT/CT
L109(       509)SEA FILE=HCAPLUS ABB=ON  PLU=ON  CRYPTOCOCCUS+PFT,NT/CT
L110(      1617)SEA FILE=HCAPLUS ABB=ON  PLU=ON  RHODOTORULA+PFT,NT/CT
L111(      1967)SEA FILE=HCAPLUS ABB=ON  PLU=ON  YARROWIA+PFT,NT/CT
L112(        14)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L102 OR L103 OR L104 OR L105
                  OR L106 OR L107 OR L108 OR L109 OR L110 OR L111)(L)DENDRITIC
                  CELL
L113(       784)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L102 OR L103 OR L104 OR L105
                  OR L106 OR L107 OR L108 OR L109 OR L110 OR L111)(L)ANTIGEN
L114          5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L112 AND L113


=> d que l135

L115(     44711)SEA FILE=HCAPLUS ABB=ON  PLU=ON  YEAST+PFT/CT
L116(      2901)SEA FILE=HCAPLUS ABB=ON  PLU=ON  KLUYVEROMYCES+PFT,NT/CT
L117(       736)SEA FILE=HCAPLUS ABB=ON  PLU=ON  HANSENULA+PFT,NT/CT
L118(      3168)SEA FILE=HCAPLUS ABB=ON  PLU=ON  PICHIA+PFT,NT/CT
L119(     56926)SEA FILE=HCAPLUS ABB=ON  PLU=ON  SACCHAROMYCES+PFT,NT/CT
L120(      5125)SEA FILE=HCAPLUS ABB=ON  PLU=ON  SCHIZOSACCHAROMYCES+PFT,NT/CT

L121(     21782)SEA FILE=HCAPLUS ABB=ON  PLU=ON  CANDIDA+PFT,NT/CT
L122(       509)SEA FILE=HCAPLUS ABB=ON  PLU=ON  CRYPTOCOCCUS+PFT,NT/CT
L123(      1617)SEA FILE=HCAPLUS ABB=ON  PLU=ON  RHODOTORULA+PFT,NT/CT
L124(      1967)SEA FILE=HCAPLUS ABB=ON  PLU=ON  YARROWIA+PFT,NT/CT
L125(      7175)SEA FILE=HCAPLUS ABB=ON  PLU=ON  DENDRITIC CELL+PFT/CT
L126(    213537)SEA FILE=HCAPLUS ABB=ON  PLU=ON  ANTIGENS+PFT,NT/CT
```

```
L127(        63)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L115 OR L116 OR L117 OR L118
                OR L119 OR L120 OR L121 OR L122 OR L123 OR L124) AND L125
L128(      1968)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L115 OR L116 OR L117 OR L118
                OR L119 OR L120 OR L121 OR L122 OR L123 OR L124) AND L126
L129(        46)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L127 AND L128
L130(    162350)SEA FILE=HCAPLUS ABB=ON  PLU=ON  ANTITUMOR AGENTS+PFT/CT
L131(        28)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L129 AND L130
L132(     35296)SEA FILE=HCAPLUS ABB=ON  PLU=ON  VACCINES+PFT/CT
L133(     36743)SEA FILE=HCAPLUS ABB=ON  PLU=ON  IMMUNITY/CT
L134(      8333)SEA FILE=HCAPLUS ABB=ON  PLU=ON  IMMUNOTHERAPY+PFT/CT
L135         25 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L131 AND (L132 OR L133 OR
                L134)


=> d que l151

L136(     44711)SEA FILE=HCAPLUS ABB=ON  PLU=ON  YEAST+PFT/CT
L137(      2901)SEA FILE=HCAPLUS ABB=ON  PLU=ON  KLUYVEROMYCES+PFT,NT/CT
L138(       736)SEA FILE=HCAPLUS ABB=ON  PLU=ON  HANSENULA+PFT,NT/CT
L139(      3168)SEA FILE=HCAPLUS ABB=ON  PLU=ON  PICHIA+PFT,NT/CT
L140(     56926)SEA FILE=HCAPLUS ABB=ON  PLU=ON  SACCHAROMYCES+PFT,NT/CT
L141(      5125)SEA FILE=HCAPLUS ABB=ON  PLU=ON  SCHIZOSACCHAROMYCES+PFT,NT/CT

L142(     21782)SEA FILE=HCAPLUS ABB=ON  PLU=ON  CANDIDA+PFT,NT/CT
L143(       509)SEA FILE=HCAPLUS ABB=ON  PLU=ON  CRYPTOCOCCUS+PFT,NT/CT
L144(      1617)SEA FILE=HCAPLUS ABB=ON  PLU=ON  RHODOTORULA+PFT,NT/CT
L145(      1967)SEA FILE=HCAPLUS ABB=ON  PLU=ON  YARROWIA+PFT,NT/CT
L146(    213537)SEA FILE=HCAPLUS ABB=ON  PLU=ON  ANTIGENS+PFT,NT/CT
L147(      9228)SEA FILE=HCAPLUS ABB=ON  PLU=ON  ANTIGEN-PRESENTING CELL+PFT,NT
                /CT
L148(      5312)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L146 AND L147
L149(        62)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L148 AND (L136 OR L137 OR
                L138 OR L139 OR L140 OR L141 OR L142 OR L143 OR L144 OR L145)
L150(        17)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L136 OR L137 OR L138 OR L139
                OR L140 OR L141 OR L142 OR L143 OR L144 OR L145)(L)(APL OR
                DENDRITI? OR SQUAMOUS OR ANTIGEN PRESENTING CELL)
L151          9 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L149 AND L150


=> d que l175

L152(     44711)SEA FILE=HCAPLUS ABB=ON  PLU=ON  YEAST+PFT/CT
L153(      2901)SEA FILE=HCAPLUS ABB=ON  PLU=ON  KLUYVEROMYCES+PFT,NT/CT
L154(       736)SEA FILE=HCAPLUS ABB=ON  PLU=ON  HANSENULA+PFT,NT/CT
L155(      3168)SEA FILE=HCAPLUS ABB=ON  PLU=ON  PICHIA+PFT,NT/CT
L156(     56926)SEA FILE=HCAPLUS ABB=ON  PLU=ON  SACCHAROMYCES+PFT,NT/CT
L157(      5125)SEA FILE=HCAPLUS ABB=ON  PLU=ON  SCHIZOSACCHAROMYCES+PFT,NT/CT

L158(     21782)SEA FILE=HCAPLUS ABB=ON  PLU=ON  CANDIDA+PFT,NT/CT
L159(       509)SEA FILE=HCAPLUS ABB=ON  PLU=ON  CRYPTOCOCCUS+PFT,NT/CT
L160(      1617)SEA FILE=HCAPLUS ABB=ON  PLU=ON  RHODOTORULA+PFT,NT/CT
L161(      1967)SEA FILE=HCAPLUS ABB=ON  PLU=ON  YARROWIA+PFT,NT/CT
L162(        14)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L152 OR L153 OR L154 OR L155
                OR L156 OR L157 OR L158 OR L159 OR L160 OR L161)(L)DENDRITIC
                CELL
L163(       784)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L152 OR L153 OR L154 OR L155
                OR L156 OR L157 OR L158 OR L159 OR L160 OR L161)(L)ANTIGEN
L164(    213537)SEA FILE=HCAPLUS ABB=ON  PLU=ON  ANTIGENS+PFT,NT/CT
L165(     35296)SEA FILE=HCAPLUS ABB=ON  PLU=ON  VACCINES+PFT/CT
L166(     36743)SEA FILE=HCAPLUS ABB=ON  PLU=ON  IMMUNITY/CT
L167(      8333)SEA FILE=HCAPLUS ABB=ON  PLU=ON  IMMUNOTHERAPY+PFT/CT
L168(      9228)SEA FILE=HCAPLUS ABB=ON  PLU=ON  ANTIGEN-PRESENTING CELL+PFT,NT
                /CT
L169(      5312)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L164 AND L168
L170(        62)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L169 AND (L152 OR L153 OR
                L154 OR L155 OR L156 OR L157 OR L158 OR L159 OR L160 OR L161)
L171(      3941)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L168(L)ANTIGEN?
```

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L172(        51)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L170 AND (L171 OR (L162 OR
                L163))
L173(        51)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L170 AND L172
L174(        40)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L165 OR L166 OR L167) AND
                L173
L175         14 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L174 AND (DENDRIT? OR APL OR
                ANTIGEN? PRESENTING CELL)/AB


=> d que l195

L176(     44711)SEA FILE=HCAPLUS ABB=ON  PLU=ON  YEAST+PFT/CT
L177(      2901)SEA FILE=HCAPLUS ABB=ON  PLU=ON  KLUYVEROMYCES+PFT,NT/CT
L178(       736)SEA FILE=HCAPLUS ABB=ON  PLU=ON  HANSENULA+PFT,NT/CT
L179(      3168)SEA FILE=HCAPLUS ABB=ON  PLU=ON  PICHIA+PFT,NT/CT
L180(     56926)SEA FILE=HCAPLUS ABB=ON  PLU=ON  SACCHAROMYCES+PFT,NT/CT
L181(      5125)SEA FILE=HCAPLUS ABB=ON  PLU=ON  SCHIZOSACCHAROMYCES+PFT,NT/CT

L182(     21782)SEA FILE=HCAPLUS ABB=ON  PLU=ON  CANDIDA+PFT,NT/CT
L183(       509)SEA FILE=HCAPLUS ABB=ON  PLU=ON  CRYPTOCOCCUS+PFT,NT/CT
L184(      1617)SEA FILE=HCAPLUS ABB=ON  PLU=ON  RHODOTORULA+PFT,NT/CT
L185(      1967)SEA FILE=HCAPLUS ABB=ON  PLU=ON  YARROWIA+PFT,NT/CT
L186(      7175)SEA FILE=HCAPLUS ABB=ON  PLU=ON  DENDRITIC CELL+PFT/CT
L187(    213537)SEA FILE=HCAPLUS ABB=ON  PLU=ON  ANTIGENS+PFT,NT/CT
L188(        63)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L176 OR L177 OR L178 OR L179
                OR L180 OR L181 OR L182 OR L183 OR L184 OR L185) AND L186
L189(      1968)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L176 OR L177 OR L178 OR L179
                OR L180 OR L181 OR L182 OR L183 OR L184 OR L185) AND L187
L190(        46)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L188 AND L189
L191(    162350)SEA FILE=HCAPLUS ABB=ON  PLU=ON  ANTITUMOR AGENTS+PFT/CT
L192(        28)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L190 AND L191
L193(    134597)SEA FILE=HCAPLUS ABB=ON  PLU=ON  DRUG DELIVERY SYSTEMS+PFT/CT
L194(        18)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L192 AND L193
L195         10 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L194 AND (DENDRIT? OR APL OR
                ANTIGEN? PRESENTING CELL)/AB


=> s l114 or l135 or l151 or l175 or l195

L197         37 L114 OR L135 OR L151 OR L175 OR L195    37 cites total for HCAPLUS.

=> file wpids

FILE 'WPIDS' ENTERED AT 17:56:50 ON 09 OCT 2003
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FILE LAST UPDATED:          9 OCT 2003      <20031009/UP>
MOST RECENT DERWENT UPDATE:     200365        <200365/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE


>>> NEW WEEKLY SDI FREQUENCY AVAILABLE --> see NEWS  <<<

>>> PATENT IMAGES AVAILABLE FOR PRINT AND DISPLAY <<<

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
    PLEASE VISIT:
 http://www.stn-international.de/training_center/patents/stn_guide.pdf <<<

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
    http://thomsonderwent.com/coverage/latestupdates/          <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER
    GUIDES, PLEASE VISIT:
    http://thomsonderwent.com/support/userguides/              <<<

=> d que l101
```

```
L93        3705 SEA FILE=WPIDS ABB=ON  PLU=ON  ANTIGEN-PRESENTING OR DENDRITI?
                OR APC
L94       31329 SEA FILE=WPIDS ABB=ON  PLU=ON  YEAST OR SACCHAROMYC? OR
                CANDIDA OR CRYPTOCOC? OR HANSENULA OR KLUYVERO? OR PICHIA OR
                PHODOTORULA OR YARROWIA OR SCHIZOSACCHAROMYC?
L95      598858 SEA FILE=WPIDS ABB=ON  PLU=ON  FUSE# OR FUSION OR FUSING OR
                ENTRAP? OR TRAP? OR INTERNAL? OR ENDOCYTO? OR PHAGOCYT?
L96          46 SEA FILE=WPIDS ABB=ON  PLU=ON  L93(S) L94
L97         526 SEA FILE=WPIDS ABB=ON  PLU=ON  L93(L)L95
L98        1474 SEA FILE=WPIDS ABB=ON  PLU=ON  L94(S)L95
L99          20 SEA FILE=WPIDS ABB=ON  PLU=ON  L96 AND (L97 OR L98)
L100         20 SEA FILE=WPIDS ABB=ON  PLU=ON  L94 AND L99
L101          5 SEA FILE=WPIDS ABB=ON  PLU=ON  L100 AND (TNF(W)LIKE OR OPGL OR
                BREAST CANCER OR MUSCLE)/TI
```

5 cites from WPIDS

```
=> dup rem l196 l64 l92 l197 l101
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removing duplicate cites

```
FILE 'MEDLINE' ENTERED AT 17:57:54 ON 09 OCT 2003

FILE 'DRUGU' ENTERED AT 17:57:54 ON 09 OCT 2003
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PROCESSING COMPLETED FOR L196
PROCESSING COMPLETED FOR L64
PROCESSING COMPLETED FOR L92
PROCESSING COMPLETED FOR L197
PROCESSING COMPLETED FOR L101
L198         54 DUP REM L196 L64 L92 L197 L101 (5 DUPLICATES REMOVED)
                ANSWERS '1-15' FROM FILE MEDLINE
                ANSWER '16' FROM FILE DRUGU
                ANSWER '17' FROM FILE EMBASE
                ANSWERS '18-51' FROM FILE HCAPLUS
                ANSWERS '52-54' FROM FILE WPIDS
```

54 cites total

```
=> s l198 and py<2001
   2 FILES SEARCHED...
L199         23 L198 AND PY<2001
```

← 21 cites after limitation by date

```
=>  d ibib abs ind 1-10
```

ind = indexing terms - these are useful to look at because they cover all of the topics in the full papers & don't have irrelevant stuff that the abstract can have

```
L199 ANSWER 1 OF 23     MEDLINE on STN
ACCESSION NUMBER:    2001116975     MEDLINE
DOCUMENT NUMBER:     20571527   PubMed ID: 11122215
TITLE:               Uptake of the yeast Malassezia furfur and its
                     allergenic components by human immature CD1a+
                     dendritic cells.
AUTHOR:              Buentke E; Zargari A; Heffler L C; Avila-Carino J;
                     Savolainen J; Scheynius A
CORPORATE SOURCE:    Department of Medicine, Unit of Clinical Allergy Research,
                     Karolinska Hospital and Institutet, Stockholm, Sweden.
SOURCE:              CLINICAL AND EXPERIMENTAL ALLERGY, (2000 Dec) 30
                     (12) 1759-70.
                     Journal code: 8906443. ISSN: 0954-7894.
PUB. COUNTRY:        ENGLAND: United Kingdom
DOCUMENT TYPE:       Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:            English
```

FILE SEGMENT: Priority Journals
ENTRY MONTH: 200102
ENTRY DATE: Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20010215

AB Atopic dermatitis (AD) is a chronic inflammatory skin disease with increasing prevalence, though still little is known of the pathomechanisms and the causes of the disease. Patients with AD often have specific IgE reactivity to the **yeast** Malassezia furfur (M. furfur), present in the normal microflora on human skin. To investigate the possible interaction of immature and mature **antigen-presenting dendritic** cells with the **yeast** M. furfur and its allergenic components. Monocyte-derived **dendritic** cells (MDDCs) generated from human peripheral blood were allowed to interact with FITC-labelled whole M. furfur **yeast** cells, M. furfur extract, a recombinant allergen from M. furfur designated rMal f 5 and M. furfur mannan, in the absence of IgE antibodies. Interaction and uptake were detected using flow cytometry and confocal laser scanning microscopy. **Internalization** of M. furfur **yeast** cells and **yeast** components by immature MDDCs was found using confocal laser scanning microscopy. Results from flow cytometric studies showed that a median of 94% (range, 65-98%) of the immature CD1a+ MDDCs were M. furfur extract positive, 81% (75-97%) rMal f 5 positive and 93% (62-98%) mannan positive. Mature CD1a+ MDDCs were significantly less efficient in this respect, with the corresponding figures only 26% (6-37%, $P < 0.01$), 6% (2-15%, $P < 0.05$) and 32% (9-50%, $P < 0.01$), respectively. Uptake of the non-glycosylated rMal f 5 by immature CD1a+ MDDCs was decreased to 27% (15-38%) by inhibition of pinocytosis. The binding of M. furfur extract and mannan was inhibited in a dose-dependent manner by methyl-alpha-D-mannopyranoside, suggesting uptake via the mannose receptor. Human immature CD1a+ MDDCs can efficiently take up M. furfur and allergenic components from the **yeast** in the absence of IgE antibodies, implying that sensitization of AD patients to M. furfur can be mediated by immature **dendritic** cells in the skin.

CT Check Tags: Human; Support, Non-U.S. Gov't
Allergens: BI, biosynthesis
*Allergens: IM, immunology
*Antigens, CD1: IM, immunology
*Dendritic Cells: IM, immunology
Dermatitis, Atopic: IM, immunology
Flow Cytometry
Fluorescein-5-isothiocyanate
Fluorescent Dyes
Fungal Proteins: BI, biosynthesis
Fungal Proteins: IM, immunology
*Malassezia: IM, immunology
Malassezia: ME, metabolism
Mannans: BI, biosynthesis
Mannans: IM, immunology
Microscopy, Confocal

index terms

RN 3326-32-7 (Fluorescein-5-isothiocyanate)
CN 0 (Allergens); 0 (**Antigens**, CD1); 0 (Fluorescent Dyes); 0 (Fungal Proteins); 0 (Mannans)

L199 ANSWER 2 OF 23 MEDLINE on STN
ACCESSION NUMBER: 2000395093 MEDLINE
DOCUMENT NUMBER: 20325070 PubMed ID: 10866793
TITLE: **Liposome-mediated** cytosolic delivery of macromolecules and its possible use in vaccine development.
AUTHOR: Owais M; Gupta C M
CORPORATE SOURCE: Inter-disciplinary Biotechnology Unit, Aligarh Muslim University, India.
SOURCE: EUROPEAN JOURNAL OF BIOCHEMISTRY, **(2000 Jul)** 267 (13) 3946-56.
Journal code: 0107600. ISSN: 0014-2956.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English
FILE SEGMENT: Priority Journals; AIDS
ENTRY MONTH: 200008
ENTRY DATE: Entered STN: 20000824
Last Updated on STN: 20000824
Entered Medline: 20000816

AB In the majority of bacterial and viral infections the generation of cytotoxic T cells is of particular interest because such pathogens are able to escape the host defence mechanisms by surviving intracellularly within the phagocytic cells. To generate a CD8+ T lymphocyte response against exogenous antigens, the prerequisite is their delivery into the cytosol followed by processing and presentation along with class I major histocompatibility complex (MHC-I) molecules. In the present study we describe the method of liposome-based delivery of antigens and other macromolecules into the cytosol of target cells. To develop safe and effective methods for generating CD8+ T lymphocytes, we exploited the fusogenic character of lipids derived from lower organisms, that is baker's yeast (Saccharomyces cerevisiae). The degree of **fusion** with model membrane systems using **yeast** lipid liposomes varied from 40-70%, as opposed to 1-8% observed with egg PtdCho liposomes, depending on the assay system used. The **fusion** of **yeast** lipid liposomes with macrophages resulted in effective delivery of the **entrapped** solutes into the cytoplasmic compartment. This was further supported by the inhibition of cellular protein synthesis in J774 A1 cells by ricin A, encapsulated in the yeast lipid liposomes. Interestingly, the model antigen ovalbumin, when **entrapped** in the **yeast** lipid liposomes, successfully elicited antigen reactive CD8+ T cell responses. It may be concluded that the liposomes made of lipids derived from S. cerevisiae can spontaneously fuse with macrophages, delivering a significant portion of their contents into the cytoplasmic compartment of the cells.

CT Check Tags: Animal; Human; Male; Support, Non-U.S. Gov't
Antigen-Presenting Cells: PH, physiology
Antigens: AD, administration & dosage
CD8-Positive T-Lymphocytes: IM, immunology
Cells, Cultured
*Cytosol: ME, metabolism
Erythrocyte Membrane: ME, metabolism
*Liposomes: AD, administration & dosage
Membrane Fusion
Mice
Mice, Inbred BALB C
Muramidase: AD, administration & dosage
Muramidase: PK, pharmacokinetics
Saccharomyces cerevisiae: ME, metabolism
*Vaccines: AD, administration & dosage

CN 0 (Antigens); 0 (Liposomes); 0 (Vaccines); EC 3.2.1.17 (Muramidase)

L199 ANSWER 3 OF 23 MEDLINE on STN
ACCESSION NUMBER: 1999292804 MEDLINE
DOCUMENT NUMBER: 99292804 PubMed ID: 10362546
TITLE: Receptor mediated and fluid phase pathways for **internalization** of the ER Hsp90 chaperone GRP94 in murine macrophages.
AUTHOR: Wassenberg J J; Dezfulian C; Nicchitta C V
CORPORATE SOURCE: Department of Cell Biology, Box 3709, Duke University Medical Center, Durham, NC 27710, USA.
CONTRACT NUMBER: DK53058 (NIDDK)
SOURCE: JOURNAL OF CELL SCIENCE, **(1999 Jul)** 112 (Pt 13) 2167-75.
Journal code: 0052457. ISSN: 0021-9533.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199909
ENTRY DATE: Entered STN: 19990913

Last Updated on STN: 19990913
Entered Medline: 19990902

AB Immunization of mice with GRP94, the endoplasmic reticulum (ER) Hsp90, elicits cytotoxic T lymphocyte (CTL) responses to chaperone-bound, source cell-derived peptides. Elicitation of a CTL response requires that GRP94-associated peptides be transferred onto major histocompatability complex (MHC) class I molecules, a process that is postulated to accompany GRP94 **internalization** by **antigen presenting** cells, such as macrophages (Mphi) and **dendritic** cells (DC). In studies of GRP94 uptake in elicited Mphi, we report that Mphi display specific cell surface binding of GRP94, and that surface-bound GRP94 can be **internalized** via receptor mediated **endocytosis**. GRP94 **internalized** by this pathway co-localized predominately with transferrin-positive early endosomes. At time periods of up to 20 minutes, little trafficking of GRP94 to the lysosomal compartment was observed. When GRP94 was present in the medium, and thus accessible to both receptor-mediated and fluid phase **internalization** pathways, **internalization** was modestly inhibited in the presence of **yeast** mannan, a competitive inhibitor of mannose/fucose receptor activity, and substantially inhibited by dimethylamiloride, an inhibitor of macropinocytosis. GRP94 **internalized** via macropinocytosis did not display prominent co-staining with the lysosomal marker LAMP-2. These data identify multiple pathways of GRP94 **internalization** and indicate that receptor-dependent uptake of GRP94 is not dependent upon its high mannose oligosaccharide moiety. Most significantly, these data demonstrate the existence of cell surface receptor(s), apparently unique to **antigen presenting** cells, that function in the binding and **internalization** of the ER chaperone GRP94.

CT Check Tags: Animal; In Vitro; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.
Antigen Presentation
Antigen-Presenting Cells: IM, immunology
Antigen-Presenting Cells: ME, metabolism
Biological Transport, Active
Endocytosis
Endoplasmic Reticulum: IM, immunology
*Endoplasmic Reticulum: ME, metabolism
Heat-Shock Proteins 70: IM, immunology
*Heat-Shock Proteins 70: ME, metabolism
Heat-Shock Proteins 90: IM, immunology
*Heat-Shock Proteins 90: ME, metabolism
Immunization
Macrophages, Peritoneal: IM, immunology
*Macrophages, Peritoneal: ME, metabolism
Membrane Proteins: IM, immunology
*Membrane Proteins: ME, metabolism
Mice
Mice, Inbred C57BL
Microscopy, Confocal
Molecular Chaperones: IM, immunology
*Molecular Chaperones: ME, metabolism
Receptors, Cell Surface: IM, immunology
Receptors, Cell Surface: ME, metabolism
Subcellular Fractions: ME, metabolism
T-Lymphocytes, Cytotoxic: IM, immunology

CN 0 (Heat-Shock Proteins 70); 0 (Heat-Shock Proteins 90); 0 (Membrane Proteins); 0 (Molecular Chaperones); 0 (Receptors, Cell Surface); 0 (glucose-regulated proteins)

L199 ANSWER 4 OF 23 MEDLINE on STN
ACCESSION NUMBER: 1999225058 MEDLINE
DOCUMENT NUMBER: 99225058 PubMed ID: 10210333
TITLE: Generation of phagocytic MAK and **MAC-DC** for therapeutic use: characterization and in vitro functional properties.
AUTHOR: Boyer A; Andreu G; Romet-Lemonne J L; Fridman W H; Teillaud J L

CORPORATE SOURCE: Laboratoire d'Immunologie Cellulaire et Clinique, Unite INSERM 255, Institut Curie, Paris, France.
SOURCE: EXPERIMENTAL HEMATOLOGY, **(1999 Apr)** 27 (4) 751-61.
Journal code: 0402313. ISSN: 0301-472X.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199906
ENTRY DATE: Entered STN: 19990628
Last Updated on STN: 19990628
Entered Medline: 19990614

AB Phagocytic cells with macrophage or dendritic cell phenotype, able to capture and ingest tumor cells, were derived in large numbers from peripheral blood mononuclear cells using two different activation procedures. Peripheral blood mononuclear cells were stimulated in nonadherent conditions in the presence of human AB serum with either granulocyte-macrophage colony-stimulating factor and dihydroxy-vitamin D3 for 7 days and with interferon-gamma for the last 18 hours to obtain activated macrophages (MAK) or with granulocyte-macrophage colony-stimulating factor and interleukin-13 for 7 days (with fresh interleukin-13 added on day 4) to obtain macrophage-dendritic cells (MAC-DC). A strong ability of MAC-DC to **phagocytose yeasts** was observed, in contrast to a low-intermediate **phagocytosis** capacity by MAK. Both CD14+ FCgammaR+ (FcgammaRI/CD64, FcgammaRII/CD32, FcgammaRIII/CD16) MAK and CD1a+/CD86+, CD14- MAC-DC were able to phagocytose whole tumor cells. However, only MAK phagocytosis was enhanced by FcgammaR engagement. MAK but not MAC-DC could lyse tumor cell in antibody-dependent cell cytotoxicity assays, via FcgammaRI. Thus, MAK as well as MAC-DC may represent valuable tools for different in vivo therapy strategies that do or do not include the use of monoclonal antibodies.

CT Check Tags: Human; Support, Non-U.S. Gov't
Antibody-Dependent Cell Cytotoxicity
Antigens, CD: BI, biosynthesis
Calcitriol: PD, pharmacology
Cell Differentiation: DE, drug effects
Cell Differentiation: IM, immunology
Cells, Cultured
Cytotoxicity Tests, Immunologic
***Dendritic Cells: CY, cytology**
Dendritic Cells: DE, drug effects
Dendritic Cells: IM, immunology
Granulocyte-Macrophage Colony-Stimulating Factor: PD, pharmacology
Immunophenotyping
Interleukin-13: PD, pharmacology
Leukocytes, Mononuclear: CY, cytology
Leukocytes, Mononuclear: DE, drug effects
Lymphocyte Activation: DE, drug effects
Lymphocyte Activation: IM, immunology
*Macrophages: CY, cytology
Macrophages: DE, drug effects
Macrophages: IM, immunology
Phagocytosis: DE, drug effects
Saccharomyces cerevisiae

RN 32222-06-3 (Calcitriol); 83869-56-1 (Granulocyte-Macrophage Colony-Stimulating Factor)
CN 0 (Antigens, CD); 0 (Interleukin-13)

L199 ANSWER 5 OF 23 MEDLINE on STN
ACCESSION NUMBER: 1999066841 MEDLINE
DOCUMENT NUMBER: 99066841 PubMed ID: 9851516
TITLE: **Monocyte-derived** dendritic cells: development of a cellular processor for clinical applications.
AUTHOR: Goxe B; Latour N; Bartholeyns J; Romet-Lemonne J L; Chokri

M
CORPORATE SOURCE: ImmunoDesigned Molecules, Paris.
SOURCE: RESEARCH IN IMMUNOLOGY, **(1998 Sep-Oct)** 149 (7-8) 643-6.
Journal code: 8907467. ISSN: 0923-2494.
PUB. COUNTRY: France
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199903
ENTRY DATE: Entered STN: 19990326
Last Updated on STN: 19990326
Entered Medline: 19990312

AB Since dendritic cells (DCs) are the most professional antigen-presenting cells, (Schuler et al., 1997), increasing interest in their use in clinical approaches has been observed. (Nestle et al., 1998; Murphy G. et al., 1996). We have developed an ex vivo standardized process for the generation of dendritic-like cells (MAC-DCs) from human blood circulating monocytes. Human monocytes can differentiate into very different functional cells according to the conditions of culture, media and cytokines used. In the present study, we demonstrate that both pure monocytes and mononuclear cells differentiate into DCs when they are grown in defined medium AIM-V in the presence of granulocyte-macrophage colony-stimulating factor (GM-CSF) plus IL13 and in approved biocompatible non-adherent bags. Quality and functional controls of the immature DCs obtained rely on bacterial sterility, viability, morphology and recovery. The MAC-DCs also present an immature DC phenotype with a low expression of CD14 and CD64, and high expression of MHC-I, MHC-II and CD40. They also express B7 costimulatory molecules (CD80, CD86), CD83, and CD1a molecules. They induce strong allogenic T-cell proliferation (mixed lymphocyte reaction as well as proliferation of autologous memory T lymphocytes when incubated in the presence of recall antigens (tuberculosis, Candida albicans, and tetanus toxoid). They also show an increase in **phagocytic** uptake of **yeast**, tumour cells and debris.
The global closed system which, under reproducible good medical practice (GMP) conditions, enables the production of dendritic cells of clinical quality, has been optimized ("Vac Cell Processor"). It contains all bags, connections, media, reagents, washing solutions, control antibodies, standard operating procedures, data management, traceability and help in the form of dedicated software.

CT Check Tags: Human; Support, Non-U.S. Gov't
Antigen Presentation: IM, immunology
Candida albicans: IM, immunology
Cell Differentiation
Cell Survival
***Dendritic Cells: CY, cytology**
Dendritic Cells: IM, immunology
Immunophenotyping
Lymphocyte Culture Test, Mixed
Macrophages: CY, cytology
Macrophages: IM, immunology
*Monocytes: CY, cytology
Monocytes: DE, drug effects
Monocytes: IM, immunology
Phagocytosis: IM, immunology

L199 ANSWER 6 OF 23 MEDLINE on STN
ACCESSION NUMBER: 96218277 MEDLINE
DOCUMENT NUMBER: 96218277 PubMed ID: 8677632
TITLE: Effect of **porcine** circovirus infection on **porcine** alveolar macrophage function.
COMMENT: Erratum in: Vet Immunol Immunopathol 1997 Mar;55(4):363
Erratum in: Vet Immunol Immunopathol 1997 May;56(3-4):363
AUTHOR: McNeilly F; Allan G M; Foster J C; Adair B M; McNulty M S; Pollock J
CORPORATE SOURCE: Department of Agriculture for Northern Ireland, Veterinary Sciences Division, Belfast, UK.

SOURCE: VETERINARY IMMUNOLOGY AND IMMUNOPATHOLOGY, **(1996 Jan)** 49 (4) 295-306.
Journal code: 8002006. ISSN: 0165-2427.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199608
ENTRY DATE: Entered STN: 19960822
Last Updated on STN: 19980206
Entered Medline: 19960809

AB The effect of porcine circovirus (PCV) infection of porcine alveolar macrophage cultures on some of the functional properties of these cells are reported. PCV infection of alveolar macrophages did not effect their ability to phagocytose and kill complement-coated yeast cells or the expression of Fc or complement receptors. A transient increase in major histocompatibility complex (MHC) class I expression in PCV-infected cells were observed 4 days after infection and a decrease in the number of cells expressing MHC class II antigens was observed 8 days after infection. Infection of alveolar macrophages with PCV also resulted in a transient decrease in their ability to act as accessory cells in mitogen-induced lymphocyte proliferation of monocyte-depleted porcine peripheral blood mononuclear cells.

CT Check Tags: Animal
Antigen-Presenting Cells: IM, immunology
Candida: IM, immunology
Cells, Cultured
Circoviridae Infections: IM, immunology
*Circoviridae Infections: VE, veterinary
Cytotoxicity, Immunologic
Flow Cytometry
Histocompatibility Antigens Class I: ME, metabolism
Histocompatibility Antigens Class II: ME, metabolism
Lymphocyte Activation
*Macrophages, Alveolar: IM, immunology
Monocytes: IM, immunology
Phagocytosis
Receptors, Complement: ME, metabolism
Receptors, Fc: ME, metabolism
Swine
*Swine Diseases: IM, immunology

CN 0 (Histocompatibility Antigens Class I); 0 (Histocompatibility Antigens Class II); 0 (Receptors, Complement); 0 (Receptors, Fc)

L199 ANSWER 7 OF 23 MEDLINE on STN
ACCESSION NUMBER: 93340627 MEDLINE
DOCUMENT NUMBER: 93340627 PubMed ID: 8393477
TITLE: Phagocytosis of **antigens** by **Langerhans** cells in vitro.
AUTHOR: Reis e Sousa C; Stahl P D; Austyn J M
CORPORATE SOURCE: Nuffield Department of Surgery, University of Oxford, John Radcliffe Hospital, Headington, United Kingdom.
SOURCE: JOURNAL OF EXPERIMENTAL MEDICINE, **(1993 Aug 1)** 178 (2) 509-19.
Journal code: 2985109R. ISSN: 0022-1007.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199308
ENTRY DATE: Entered STN: 19930917
Last Updated on STN: 19930917
Entered Medline: 19930830

AB **Dendritic** cells (DC) isolated from lymphoid tissues are generally thought to be nonphagocytic in culture. It has therefore been unclear how these cells could acquire particulate **antigens** such as microorganisms for initiation of primary immune responses. Lymphoid DC

derive in part from cells that have migrated from nonlymphoid tissues, such as Langerhans cells (LC) of skin. The ability of LC to **internalize** a variety of particles was studied by electron, ultraviolet, phase, and differential interference contrast microscopy, and by two-color flow cytometry. Freshly isolated LC in epidermal cell suspensions phagocytosed the **yeast** cell wall derivative zymosan, intact **Saccharomyces** cerevisiae, representatives of two genera of Gram-positive bacteria, Corynebacterium parvum and Staphylococcus aureus, as well as 0.5-3.5-microns latex microspheres. During maturation in culture, the phagocytic activity of these cells was markedly reduced. Likewise, freshly isolated splenic DC were more phagocytic than cultured DC for two types of particle examined, zymosan and latex beads. Unlike macrophages, LC did not bind or **internalize** sheep erythrocytes before or after opsonization with immunoglobulin G or complement, and did not **internalize** colloidal carbon. The receptors mediating zymosan uptake by LC were examined. For this particle, C57BL/6 LC were considerably more phagocytic than BALB/c LC and exhibited a reproducible increase in phagocytic activity after 6 h of culture followed by a decline, whereas this initial rise did not occur for BALB/c LC. These differential kinetics of uptake were reflected in the pattern of zymosan binding at 4 degrees C, and **endocytosis** of the soluble tracer fluorescein isothiocyanate-mannose-bovine serum albumin at 37 degrees C. Zymosan uptake by LC from both strains of mice was inhibited in the presence of mannan or beta-glucan, although to different extents, but not by antibodies specific for CR3 (CD11b/CD18). These data indicate that zymosan uptake by LC can be mediated by a mannose/beta-glucan receptor(s) that is differentially expressed in the two strains of mice and that is downregulated during maturation of LC in culture.

CT Check Tags: Animal; Male; Support, Non-U.S. Gov't
***Antigens: IM, immunology**
Cells, Cultured
***Langerhans Cells: IM, immunology**
Langerhans Cells: ME, metabolism
Langerhans Cells: UL, ultrastructure
Macrophage-1 Antigen: IM, immunology
Mice
Mice, Inbred BALB C
Mice, Inbred C3H
Mice, Inbred C57BL
Microscopy, Electron
***Phagocytosis**
Propionibacterium acnes: IM, immunology
Receptors, Cell Surface: IM, immunology
Receptors, Immunologic: IM, immunology
Saccharomyces cerevisiae: IM, immunology
Spleen: CY, cytology
Spleen: IM, immunology
Staphylococcus aureus: IM, immunology
Zymosan

RN 9010-72-4 (Zymosan)

CN 0 (**Antigens**); 0 (Macrophage-1 **Antigen**); 0 (Receptors, Cell Surface); 0 (Receptors, Immunologic); 0 (beta-glucan receptor); 0 (mannose receptor)

L199 ANSWER 8 OF 23 MEDLINE on STN
ACCESSION NUMBER: 92155806 MEDLINE
DOCUMENT NUMBER: 92155806 PubMed ID: 1371267
TITLE: Development of a Langerhans cell phenotype from peripheral blood monocytes.
AUTHOR: Rossi G; Heveker N; Thiele B; Gelderblom H; Steinbach F
CORPORATE SOURCE: Institut fur Molekularbiologie und Biochemie, Freie Universitat Berlin, F.R.G.
SOURCE: IMMUNOLOGY LETTERS, **(1992 Feb)** 31 (2) 189-97. Journal code: 7910006. ISSN: 0165-2478.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English

FILE SEGMENT: Priority Journals
ENTRY MONTH: 199203
ENTRY DATE: Entered STN: 19920410
Last Updated on STN: 19960129
Entered Medline: 19920323

AB Epidermal Langerhans cells (ELC) are definitively primed to differentiate into **dendritic** cells (DC). It is unknown at what stage of monocyte development this priming occurs. In a culture system characterized by low paracrine stimulation, i.e. Iscove's modified Dulbecco medium (IMDM) with 2% FCS, we tested the ability of peripheral blood monocytes to turn to the route of the LC-DC lineage. In this system monocytes did not develop significant **yeast** cell phagocytosis, although mannose receptors were available. However, they became strong stimulators of mannan specific T cell proliferation. Phenotype development was analysed by flow cytometry using the monoclonal antibodies OKT6 (CD1a), IOT2 (HLA-DR), IOM2 (CD14) and the ligand Man-BSA-FITC. CD1a was the first marker which distinguished cultured monocytes from developing macrophages, obtained by addition of 8% human serum. Like cord blood Langerhans cells (CBLC) they **internalized** OKT6 in deep coated pits. They maintained a phenotype of monocyte derived Langerhans cells (MoLC) during eight days of in vitro culture, expressing CD1a, mannose receptors and HLA-DR and decreasing CD14, if left in their own conditioned medium. MoLC could be converted into macrophages by addition of human serum only within the first four days in vitro. Our data suggest that monocytes acquire an LC phenotype by autocrine stimulation.

CT Check Tags: Human; In Vitro; Support, Non-U.S. Gov't
Antigens, CD
Antigens, CD1
Antigens, CD14
Antigens, Differentiation, Myelomonocytic
Cell Differentiation
Culture Media
HLA-DR Antigens
*Langerhans Cells: CY, cytology
Langerhans Cells: IM, immunology
Langerhans Cells: PH, physiology
*Monocytes: CY, cytology
Monocytes: IM, immunology
Monocytes: PH, physiology
Phagocytosis
Phenotype
Receptors, Immunologic: ME, metabolism

CN 0 (**Antigens**, CD); 0 (**Antigens**, CD1); 0 (**Antigens**, CD14); 0 (**Antigens**, Differentiation, Myelomonocytic); 0 (Culture Media); 0 (HLA-DR **Antigens**); 0 (Receptors, Immunologic); 0 (mannose receptor)

L199 ANSWER 9 OF 23 DRUGU COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 1999-33374 DRUGU P
TITLE: **Dendritic** cell secretion of IL-15 is induced by recombinant huCD40LT and augments the stimulation of antigen-specific **cytolytic** T cells.
AUTHOR: Kuniyoshi J S; Kuniyoshi C J; Lim A M; Wang F Y; Bade E R; Lau R; Thomas E K; Weber J S
CORPORATE SOURCE: Univ.Southern-California; Immunex
LOCATION: Los Angeles, Cal.; Seattle, Wash., USA
SOURCE: Cell.Immunol. (193, No. 1, 48-58, 1999) 8 Fig. 47 Ref.
CODEN: CLIMB8 ISSN: 0008-8749
AVAIL. OF DOC.: Department of Molecular Microbiology, University of Southern California School of Medicine, Los Angeles, California 90033, U.S.A.
LANGUAGE: English
DOCUMENT TYPE: Journal
FIELD AVAIL.: AB; LA; CT
FILE SEGMENT: Literature
AN 1999-33374 DRUGU P
AB Peripheral blood-derived **dendritic** cells (DC) treated with a

recombinant **fusion** protein incorporating 3 covalently linked extracellular CD40L domains (huCD40LT) and/or interferon-gamma (IFNg) stimulated enhanced T cell proliferation to CASTA, a soluble protein from **Candida** albicans. IFNg enhanced proliferation beyond that stimulated by huCD40LT-treated DC in PBMC from melanoma patients. huCD40LT resulted in DC from normal donors with an enhanced ability to stimulate antigen-specific cytolytic and IFNg-secreting T cells after stimulation. IL-15 production by DC increased with huCD40LT and correlated with increased antigen-specific immunostimulatory ability of DC. Addition of anti-CD40 antibody abrogated the increase in IL-15 production. IFNg + huCD40LT, induced increased synthesis of IL-12 from DC. Neutralizing antibodies to IL-12 and IL-15 blocked DC-induced proliferation to CASTA.

ABEX DC treated with huCD40LT stimulated an increase in proliferation in response to CASTA in all normal donors and patients vs. DC grown in GM-CSF and IL-4 (control DC). In melanoma patients and normal donors, IFNg enhanced proliferation beyond that stimulated by huCD40LT-treated DC. huCD40LT alone or combined with IFNg augments the capacity of DC from normal donor and melanoma patient PBMC to stimulate proliferative T cell responses to a soluble protein. The development of the Flu antigen-specific CTL was augmented by DC treated with huCD40LT. huCD40LT resulted in DC from normal donors with an enhanced ability to stimulate antigen-specific cytolytic and IFNg-secreting T cells after a single in-vitro stimulation compared with control or IFNg-treated DC. MART-1 peptide-pulsed DC treated with huCD40LT stimulated antigen-specific cytotoxicity. Effectors stimulated with IFNg-treated or untreated DC did not show MART-1 cytotoxicity. Treatment of DC cultures with huCD40LT or IFNg + huCD40LT, but not IFNg alone resulted in greater than a 4-fold increase of MART-1-sepcific IFNg producing effectors compared with control DC. IL-15 production by DC increased after huCD40LT, but not in response to treatment with IFNg. Addition of anti-CD40 antibody abrogated the increase in IL-15 production by huCD40LT and IFNg-treated DC. IFNg plus huCD40LT, but not huCD40LT alone induced increased synthesis of IL-12 from peripheral blood-derived DC. Neutralizing antibodies to IL-12 and IL-15 blocked DC-induced proliferation to CASTA. An anti-IL-15, but not an anti-IL-12 monoclonal antibody blocked the expansion of HLA-A2-restricted antigen-specific T cells stimulated by IFNg + huCD40LT treated DC. (E161/ECB)

AN 1999-33374 DRUGU P
P Pharmacology
20 Immunological
50 Biological Response Modifiers

CT [01] INTERFERON-GAMMA *PH; INTERFERG *RN; IN-VITRO *FT; PERIPHERAL *FT; BLOOD *FT; **DENDRITIC** *FT; CELL *FT; HUCD40LT *FT; THYMOCYTE *FT; PROLIFERATION *FT; **CANDIDA** *FT; ALBICANS *FT; MELANOMA *FT; STIMULATION *FT; ANTIGEN *FT; CYTOLYSIS *FT; INTERLEUKIN-15 *FT; CONC. *FT; IMMUNOSTIMULANT *FT; CD40 *FT; MONOCLONAL *FT; ANTIBODY *FT; INTERLEUKIN-12 *FT; SECRETION *FT; LYMPHOCYTE *FT; FUNGUS *FT; CYTOSTATICS *FT; IMMUNOSTIMULANTS *FT; VIRUCIDES *FT; PH *FT

L199 ANSWER 10 OF 23 EMBASE
on STN

ACCESSION NUMBER: 96333504 EMBASE
DOCUMENT NUMBER: 1996333504
TITLE: **Dendritic** cells process exogenous viral proteins and virus-like particles for class I presentation to CD8+ cytotoxic T lymphocytes.
AUTHOR: Bachmann M.E.; Lutz M.B.; Layton G.T.; Harris S.J.; Fehr T.; Rescigno M.; Ricciardi-Castagnoli P.
CORPORATE SOURCE: CNR Cellular Mol Pharmacology Center, Via Vanvitelli 32,I-20129 Milano, Italy
SOURCE: European Journal of Immunology, (1996) 26/11 (2595-2600). ISSN: 0014-2980 CODEN: EJIMAF
COUNTRY: Germany
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
026 Immunology, Serology and Transplantation

LANGUAGE: English
SUMMARY LANGUAGE: English
AB Previous reports have indicated that both **dendritic** cells and macrophages have the ability to induce cytotoxic T lymphocyte (CTL) and T helper (Th) cell responses in vivo. **Dendritic** cells process exogenous antigens conventionally for presentation on major histocompatibility complex (MHC) class II molecules. However, unconventional processing of exogenous antigens in vitro for presentation on MHC class I molecules is still an open question. In this study, we report that a cloned **dendritic** cell line (D2SC/1) is able to present cell debris-associated exogenous viral proteins to MHC class I-restricted CTL in vitro. The **dendritic** cell line was very efficient in processing recombinant lymphocytic choriomeningitis virus nucleoprotein (LCMV NP) and presenting the class I-restricted epitope to CTL primed in vivo. Peritoneal macrophages could also process the recombinant LCMV NP for subsequent MHC class I presentation, but were less efficient compared to the **dendritic** cells. Furthermore, recombinant **yeast**-derived virus-like particles carrying the HIV-1 V3 loop (V3-VLP), which are protenaceous and do not contain any lipid, were also found to be efficiently processed by the **dendritic** cell line for presentation of the class I-restricted epitope. These results clearly indicate that viral proteins, in particulate form or associated with cell debris, are processed by **dendritic** cells for CTL induction.
CT Medical Descriptors:
***antigen presentation**
***dendritic cell**
***virus particle**
animal cell
article
cytotoxic t lymphocyte
lymphocytic choriomeningitis virus
mouse
nonhuman
peritoneum macrophage
priority journal
Drug Descriptors:
*major histocompatibility antigen class 1
*virus nucleoprotein
*virus protein
cd8 antigen

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L199 ANSWER 11 OF 23 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:466692 HCAPLUS
DOCUMENT NUMBER: 139:51596
TITLE: Breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer especially breast cancer
INVENTOR(S): Jiang, Yuqiu; Dillon, Davin C.; Mitcham, Jennifer L.; Xu, Jiangchun; Harlocker, Susan L.
PATENT ASSIGNEE(S): Corixa Corporation, USA
SOURCE: U.S., 180 pp., Cont.-in-part of U.S. Ser. No. 389,681.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 15
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6579973	B1	20030617	US 1999-433826	19991103
US 6387697	B1	20020514	US 1998-222575	19981228
US 6590076	B1	20030708	US 1999-285480	19990402
US 2002102602	A1	20020801	US 1999-339338	19990623

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     US 6573368        B2   20030603
     US 6518237        B1   20030211       US 1999-389681   19990902
     WO 2000060076     A2   20001012       WO 2000-US5308   20000215 <--
     WO 2000060076     A3   20011220
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             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     BR 2000009537     A    20020108       BR 2000-9537     20000215
     EP 1183348        A2   20020306       EP 2000-919352   20000215
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     JP 2002540789     T2   20021203       JP 2000-609567   20000215
     US 2003104366     A1   20030605       US 2000-551621   20000417
     US 6528054        B1   20030304       US 2000-620405   20000720
     US 2002085998     A1   20020704       US 2001-834759   20010413
     NO 2001004769     A    20011129       NO 2001-4769     20011001
     US 2002150581     A1   20021017       US 2001-7805     20011207
     US 2003023036     A1   20030130       US 2002-76622    20020213
     US 2003166022     A1   20030904       US 2002-124805   20020415
PRIORITY APPLN. INFO.:                    US 1998-222575   A2 19981228
                                          US 1999-285480   A2 19990402
                                          US 1999-339338   A2 19990623
                                          US 1999-389681   A2 19990902
                                          US 1999-433826   A  19991103
                                          WO 2000-US5308   W  20000215
                                          US 2000-551621   A2 20000417
                                          US 2000-590751   A2 20000608
                                          US 2000-604287   A2 20000622
                                          US 2000-620405   A2 20000720
                                          US 2001-834759   A2 20010413
                                          US 2001-7805     A2 20011207
                                          US 2002-76622    A2 20020213
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AB Compns. and methods for the therapy and diagnosis of cancer, such as breast cancer, are disclosed. Compns. may comprise one or more breast tumor proteins, immunogenic portion thereof, or polynucleotides that encode such portions. Alternatively, a therapeutic compn. may comprise an **antigen presenting cell** that expresses a breast tumor protein, or a T cell that is specific for cells expressing such a protein. Such compns. may be used, for example, for the prevention and treatment of diseases such as breast cancer. Diagnostic methods based on detecting a breast tumor protein, or mRNA encoding such a protein, in a sample are also provided.

IC ICM C07K001-00
ICS C07K014-00

NCL 530806000; 530350000

CC 15-2 (Immunochemistry)
Section cross-reference(s): 3, 9, 14, 63

ST breast tumor protein antigen oligonucleotide antibody cancer diagnosis therapy; vaccine breast tumor antigen antibody oligonucleotide probe primer diagnosis

IT PCR (polymerase chain reaction)
(RT-PCR (reverse transcription-PCR); breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT **Epitopes**
(T helper; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT T cell (lymphocyte)
(activation; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT Immunostimulants

(adjuvants; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT Purification
(affinity, tag; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT Samples
(biol.; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT **Antigen-presenting cell**
Antiserums
Antitumor agents
B cell (lymphocyte)
CD4-positive T cell
CD8-positive T cell
DNA sequences
Dendritic cell
Escherichia coli
Fibroblast
Genetic vectors
Immunostimulants
Macrophage
Mammary gland, neoplasm
Molecular cloning
Monocyte
Nucleic acid hybridization
PCR (polymerase chain reaction)
Protein sequences
T cell (lymphocyte)
Test kits
Yeast
cDNA library
cDNA sequences
(breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT mRNA
RL: AMX (Analytical matrix); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT Primers (nucleic acid)
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT Probes (nucleic acid)
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT Gene, animal
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT Enhancer (genetic element)
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT Antibodies
Fusion proteins (chimeric proteins)
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT Diagnosis
(cancer; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)
IT **Drug delivery systems**
(carriers; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)
IT Immunoglobulins
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fragments; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)
IT Diagnosis
(genetic; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)
IT T cell (lymphocyte)
(helper cell, epitope; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)
IT Diagnosis
(immunodiagnosis; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)
IT Animal cell
(mammalian; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)
IT Antibodies
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monoclonal; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)
IT T cell (lymphocyte)
(proliferation; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)
IT **Antigens**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tumor-assocd., 19310..seq_B726P breast tumor antigen; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)
IT **Antigens**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tumor-assocd., 23103.seq_B726P breast tumor antigen; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)
IT **Antigens**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tumor-assocd., 23113.seq_B726P; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)
IT **Antigens**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tumor-assocd., 27068.seq_B726P breast tumor antigen; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)
IT **Antigens**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tumor-assocd., 27490.seq_B726P; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)
IT **Antigens**

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tumor-assocd., B726P breast tumor antigen; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT **Antigens**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tumor-assocd., B726P-20 breast tumor antigen; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT **Antigens**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tumor-assocd., B726P-74 breast tumor antigen; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT **Antigens**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tumor-assocd., B726P-79 breast tumor antigen; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT **Antigens**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tumor-assocd., breast tumor-assocd.; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT **Antigens**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tumor-assocd., spliced_seq_B726P breast tumor antigen; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT **Vaccines**
(tumor; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT **Antitumor agents**
(vaccines; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT 544724-39-2P
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT 544717-51-3P
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(nucleotide sequence; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

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RL: PRP (Properties)
(unclaimed nucleotide sequence; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

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RL: PRP (Properties)
(unclaimed nucleotide sequence; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT 544725-04-4 544726-17-2 544726-20-7 544726-22-9 544729-09-1
544729-10-4 544729-11-5 544729-12-6
RL: PRP (Properties)
(unclaimed protein sequence; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

IT 544726-35-4
RL: PRP (Properties)
(unclaimed sequence; breast tumor proteins, oligonucleotides and antibodies for treatment and diagnosis of cancer esp. breast cancer)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L199 ANSWER 12 OF 23 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:113381 HCAPLUS
DOCUMENT NUMBER: 138:168805
TITLE: Breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer
INVENTOR(S): Jiang, Yuqiu; Dillon, Davin C.; Mitcham, Jennifer L.; Xu, Jiangchun
PATENT ASSIGNEE(S): Corixa Corporation, USA
SOURCE: U.S., 170 pp., Cont.-in-part of U.S. Ser. No. 339,338.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 15
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6518237	B1	20030211	US 1999-389681	19990902
US 6387697	B1	20020514	US 1998-222575	19981228
US 6590076	B1	20030708	US 1999-285480	19990402
US 2002102602	A1	20020801	US 1999-339338	19990623
US 6573368	B2	20030603		
US 6579973	B1	20030617	US 1999-433826	19991103

PI WO 2000060076 A2 20001012 WO 2000-US5308 20000215 <--
WO 2000060076 A3 20011220
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BR 2000009537 A 20020108 BR 2000-9537 20000215
EP 1183348 A2 20020306 EP 2000-919352 20000215
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
JP 2002540789 T2 20021203 JP 2000-609567 20000215
US 2003104366 A1 20030605 US 2000-551621 20000417
US 6528054 B1 20030304 US 2000-620405 20000720
US 2002085998 A1 20020704 US 2001-834759 20010413
NO 2001004769 A 20011129 NO 2001-4769 20011001
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US 1999-285480 A2 19990402
US 1999-339338 A2 19990623
US 1999-389681 A2 19990902
US 1999-433826 A 19991103
WO 2000-US5308 W 20000215
US 2000-551621 A2 20000417
US 2000-590751 A2 20000608
US 2000-604287 A2 20000622
US 2000-620405 A2 20000720
US 2001-834759 A2 20010413
US 2001-7805 A2 20011207
US 2002-76622 A2 20020213

AB Compns. and methods for the therapy and diagnosis of cancer, such as breast cancer, are disclosed. Compns. may comprise one or more breast tumor proteins, immunogenic portions thereof, or polynucleotides that encode such portions. Alternatively, a therapeutic compn. may comprise an **antigen presenting cell** that expresses a breast tumor protein, or a T cell that is specific for cells expressing such a protein. Such compns. may be used, for example, for the prevention and treatment of diseases such as breast cancer. Diagnostic methods based on detecting a breast tumor protein, or mRNA encoding such a protein, in a sample are also provided.

IC ICM C12Q001-68
ICS A61K038-00; A01N037-18; C07H021-02
NCL 514002000; 435006000; 530300000; 536023100
CC 15-2 (Immunochemistry)
Section cross-reference(s): 1, 3, 9, 14, 63
ST breast tumor antigen oligonucleotide antibody cancer vaccine diagnosis therapy
IT Cell proliferation
(T cell; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT **Epitopes**
(T helper; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT Immunostimulants
(adjuvants; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT Labels
(affinity tag; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT Diagnosis
(agents; breast tumor antigens, polynucleotides and antibodies for

treatment and diagnosis of breast cancer)

IT Samples
(biol.; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)

IT **Antigen-presenting cell**
Antitumor agents
B cell (lymphocyte)
CD4-positive T cell
CD8-positive T cell
DNA sequences
Dendritic cell
Drug delivery systems
Escherichia coli
Fibroblast
Genetic vectors
Human
Immunotherapy
Macrophage
Mammary gland, neoplasm
Microarray technology
Molecular cloning
Monocyte
Nucleic acid hybridization
Protein sequences
T cell (lymphocyte)
Tumor markers
Yeast
cDNA library
cDNA sequences
(breast tumor **antigens**, polynucleotides and antibodies for treatment and diagnosis of breast cancer)

IT Fusion proteins (chimeric proteins)
Primers (nucleic acid)
Probes (nucleic acid)
mRNA
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)

IT Polynucleotides
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)

IT Antibodies
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)

IT Diagnosis
Diagnosis
(cancer, breast cancer; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)

IT **Drug delivery systems**
(carriers; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)

IT Gene, animal
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(for breast tumor antigens; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)

IT Immunoglobulins
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(fragments; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT Diagnosis
(genetic; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT T cell (lymphocyte)
(helper cell, epitope; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT Diagnosis
(immunodiagnosis; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT Animal cell
(mammalian; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT Mammary gland, neoplasm
(metastasis; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT Antibodies
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monoclonal; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT Immunostimulants
(non-specific immune response enhancer; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT T cell (lymphocyte)
(proliferation; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT PCR (polymerase chain reaction)
(subtraction; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT Affinity
(tag; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT **Vaccines**
(tumor, breast cancer; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT **Antigens**
RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tumor-assocd., B726P; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT **Antigens**
RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tumor-assocd., SYN18C6; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT **Antigens**
RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tumor-assocd., breast; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT **Immunity**
(type I; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT **Antitumor agents**
(vaccines, breast cancer; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)
IT 497128-00-4P 497131-54-1P 497131-56-3P 497131-58-5P
RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation);

BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)

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497132-15-7P

RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(nucleotide sequence; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)

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497134-36-8P 497134-37-9P 497134-38-0P

RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(nucleotide sequence; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)

IT 497134-92-6 497134-93-7 497134-94-8

RL: PRP (Properties)
(unclaimed nucleotide sequence; breast tumor antigens, polynucleotides and antibodies for treatment and diagnosis of breast cancer)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L199 ANSWER 13 OF 23 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:790245 HCAPLUS
DOCUMENT NUMBER: 137:309472
TITLE: Prostate tumor proteins for immunotherapy of prostate cancer
INVENTOR(S): Xu, Jiangchun; Dillon, Davin C.; Mitcham, Jennifer Lynn
PATENT ASSIGNEE(S): Corixa Corporation, USA
SOURCE: U.S., 143 pp., Cont.-in-part of U.S. Ser. No. 159,812.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 28
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6465611	B1	20021015	US 1999-232149	19990115

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    US 6261562        B1   20010717       US 1998-20956    19980209
    ZA 9801585        A    19980904       ZA 1998-1585     19980225 <--
    US 6262245        B1   20010717       US 1998-30607    19980225
    US 2002090372     A1   20020711       US 1998-115453   19980714
    US 6613872        B1   20030902       US 1998-159812   19980923
    US 6395278        B1   20020528       US 1999-352616   19990713
    CA 2334038        AA   20000127       CA 1999-2334038  19990714 <--
    WO 2000004149     A2   20000127       WO 1999-US15838  19990714 <--
    WO 2000004149     A3   20000720
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            JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
            MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
            TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
            RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
            ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
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    AU 9953148        A1   20000207       AU 1999-53148    19990714 <--
    AU 762812         B2   20030703
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    BR 9912007        A    20020129       BR 1999-12007    19990714
    JP 2002520054     T2   20020709       JP 2000-560247   19990714
    US 6329505        B1   20011211       US 1999-439313   19991112
    US 6620922        B1   20030916       US 2000-636215   20000810
    NO 2001000196     A    20010312       NO 2001-196      20010112
    US 2002022248     A1   20020221       US 2001-759143   20010112
    US 2002051977     A1   20020502       US 2001-780669   20010209
    US 2002193296     A1   20021219       US 2001-895814   20010629
    US 2003088062     A1   20030508       US 2001-10940    20011205
    US 2002183251     A1   20021205       US 2001-12896    20011210
    US 2003157089     A1   20030821       US 2002-144678   20020509
    US 2003185830     A1   20031002       US 2002-294025   20021112
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                                        US 1998-20956    A2 19980209
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                                        US 1999-232149   A2 19990115
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                                        US 2000-570737   A2 20000512
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                                        US 2000-651236   A2 20000829
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                                        US 2000-679426   A2 20001002
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                                        US 2001-852911   A2 20010509
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US 2001-895814 A2 20010629
US 2001-12896 A2 20011210
US 2002-144678 A2 20020509

AB Compds. and methods for treating prostate cancer are provided. The inventive compds. include polypeptides contg. at least a portion of a prostate tumor protein. Vaccines and pharmaceutical compns. for immunotherapy of prostate cancer comprising such polypeptides, or DNA mols. encoding such polypeptides, are also provided, together with DNA mols. for prepg. the inventive polypeptides. Also provided are isolated T cells or **antigen presenting cells** incubated with prostate tumor proteins and reintroduced into patients for treating prostate cancer.

IC ICM A61K038-00
ICS C07K001-00; A01N037-18

NCL 530300000

CC 15-2 (Immunochemistry)
Section cross-reference(s): 3, 9, 63

ST prostate tumor protein antigen immunotherapy vaccine

IT **Histocompatibility antigens**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(HLA-A2, epitope; prostate tumor proteins for immunotherapy of prostate cancer)

IT **Epitopes**
(HLA-A2; prostate tumor proteins for immunotherapy of prostate cancer)

IT Immunostimulants
(adjuvants; prostate tumor proteins for immunotherapy of prostate cancer)

IT **Drug delivery systems**
(carriers; prostate tumor proteins for immunotherapy of prostate cancer)

IT **Immunity**
(cell-mediated; prostate tumor proteins for immunotherapy of prostate cancer)

IT T cell (lymphocyte)
(cytotoxic; prostate tumor proteins for immunotherapy of prostate cancer)

IT Animal cell
(mammalian; prostate tumor proteins for immunotherapy of prostate cancer)

IT Mononuclear cell (leukocyte)
(peripheral blood; prostate tumor proteins for immunotherapy of prostate cancer)

IT Blood
(peripheral mononuclear cells; prostate tumor proteins for immunotherapy of prostate cancer)

IT Adoptive immunotherapy
Antigen-presenting cell
Antiserums
Antitumor agents
Dendritic cell
Escherichia coli
Genetic vectors
Human
Immunostimulants
Immunotherapy
Macrophage
Molecular cloning
Prostate gland, neoplasm
Protein sequences
T cell (lymphocyte)
Yeast
cDNA sequences
(prostate tumor proteins for immunotherapy of prostate cancer)

IT Antibodies
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prostate tumor proteins for immunotherapy of prostate cancer)

IT Fusion proteins (chimeric proteins)
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prostate tumor proteins for immunotherapy of prostate cancer)

IT Proteins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prostate tumor; prostate tumor proteins for immunotherapy of prostate cancer)

IT Mutagenesis
(site-directed, addn. or insertion; prostate tumor proteins for immunotherapy of prostate cancer)

IT Mutagenesis
(site-directed, deletion; prostate tumor proteins for immunotherapy of prostate cancer)

IT Mutagenesis
(site-directed, substitution; prostate tumor proteins for immunotherapy of prostate cancer)

IT **Antigens**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tumor-assocd., prostate tumor; prostate tumor proteins for immunotherapy of prostate cancer)

IT **Vaccines**
(tumor; prostate tumor proteins for immunotherapy of prostate cancer)

IT **Antitumor agents**
(vaccines; prostate tumor proteins for immunotherapy of prostate cancer)

IT 255825-35-5P 470506-22-0P 470506-29-7P 470506-33-3P 470506-89-9P
470506-92-4P 470506-94-6P 470507-04-1P 470507-06-3P 470507-26-7P
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; prostate tumor proteins for immunotherapy of prostate cancer)

IT 470506-19-5P 470506-20-8P 470506-21-9P 470506-23-1P 470506-24-2P
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470508-49-7P 470508-50-0P 470508-51-1P
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(nucleotide sequence; prostate tumor proteins for immunotherapy of prostate cancer)

IT 470508-52-2, 1: PN: US6465611 SEQID: 1 unclaimed DNA 470508-53-3, 4: PN: US6465611 SEQID: 4 unclaimed DNA 470508-54-4, 5: PN: US6465611 SEQID: 5 unclaimed DNA 470508-55-5, 6: PN: US6465611 SEQID: 6 unclaimed DNA 470508-56-6, 7: PN: US6465611 SEQID: 7 unclaimed DNA 470508-57-7
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470509-43-4 470509-44-5 470509-45-6 470509-46-7 470509-47-8
470509-48-9 470509-49-0 470509-50-3 470509-51-4 470509-52-5
RL: PRP (Properties)
(unclaimed nucleotide sequence; prostate tumor proteins for immunotherapy of prostate cancer)

IT 470509-53-6
RL: PRP (Properties)
(unclaimed protein sequence; prostate tumor proteins for immunotherapy of prostate cancer)

IT 255825-36-6 255825-37-7 256219-77-9
RL: PRP (Properties)
(unclaimed sequence; prostate tumor proteins for immunotherapy of prostate cancer)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L199 ANSWER 14 OF 23 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:575635 HCAPLUS
DOCUMENT NUMBER: 137:120738
TITLE: Differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer
INVENTOR(S): Jiang, Yuqiu; Dillon, Davin C.; Mitcham, Jennifer L.; Xu, Jiangchun
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 127 pp., Cont.-in-part of U.S. Ser. No. 285,480.

CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 15
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 2002102602	A1	20020801	US 1999-339338	19990623	
US 6573368	B2	20030603			
US 6387697	B1	20020514	US 1998-222575	19981228	
US 6590076	B1	20030708	US 1999-285480	19990402	
US 6518237	B1	20030211	US 1999-389681	19990902	
US 6579973	B1	20030617	US 1999-433826	19991103	
WO 2000060076	A2	20001012	WO 2000-US5308	20000215	<--
WO 2000060076	A3	20011220			
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
BR 2000009537	A	20020108	BR 2000-9537	20000215	
EP 1183348	A2	20020306	EP 2000-919352	20000215	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
JP 2002540789	T2	20021203	JP 2000-609567	20000215	
US 2003104366	A1	20030605	US 2000-551621	20000417	
US 6528054	B1	20030304	US 2000-620405	20000720	
US 2002085998	A1	20020704	US 2001-834759	20010413	
NO 2001004769	A	20011129	NO 2001-4769	20011001	
US 2002150581	A1	20021017	US 2001-7805	20011207	
US 2003023036	A1	20030130	US 2002-76622	20020213	
US 2003166022	A1	20030904	US 2002-124805	20020415	

PRIORITY APPLN. INFO.:

US 1998-222575	A2	19981228
US 1999-285480	A2	19990402
US 1999-339338	A2	19990623
US 1999-389681	A2	19990902
US 1999-433826	A	19991103
WO 2000-US5308	W	20000215
US 2000-551621	A2	20000417
US 2000-590751	A2	20000608
US 2000-604287	A2	20000622
US 2000-620405	A2	20000720
US 2001-834759	A2	20010413
US 2001-7805	A2	20011207
US 2002-76622	A2	20020213

AB The invention provides nucleic acid sequences and their encoded proteins which are differentially expressed between normal breast tissue and breast tumor tissues in cDNA subtraction libraries and PCR-based subtraction using SCID-passaged tumor RNA. Expression levels are detd. by colony PCR amplification. The inventive compds. include polypeptides contg. at least a portion of a breast tumor antigen. Vaccines and pharmaceutical compns. for immunotherapy of breast cancer comprising such polypeptides, or polynucleotides encoding such polypeptides, are provided, together with polynucleotides for prepg. the inventive polypeptides. The inventive polypeptides may be used to generate antibodies useful for the diagnosis and monitoring of breast cancer.

IC ICM G01N033-53
ICS C12Q001-68; A01N037-18; A01N043-04
NCL 435007100
CC 3-3 (Biochemical Genetics)
Section cross-reference(s): 1, 6, 9, 13, 14
ST breast cancer antigen cDNA sequence human; diagnosis therapy breast cancer

antigen cDNA sequence
IT Cell proliferation
(T cell; differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)
IT Diagnosis
(cancer; differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)
IT Escherichia coli
Yeast
(cloning host; differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)
IT Antibodies
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(conjugates; differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)
IT Test kits
(diagnostic; differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)
IT Antigen-presenting cell
Antitumor agents
CD4-positive T cell
CD8-positive T cell
Dendritic cell
Gene expression profiles, animal
Human
Macrophage
Mammary gland
Mammary gland, neoplasm
Molecular cloning
Protein sequences
T cell (lymphocyte)
Tumor markers
cDNA sequences
(differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)
IT Antibodies
Primers (nucleic acid)
Probes (nucleic acid)
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)
IT Fusion proteins (chimeric proteins)
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)
IT Antibodies
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(immobilized; differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)
IT Animal cell
(mammalian, cloning host; differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)
IT Antibodies
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(monoclonal; differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)
IT T cell (lymphocyte)
(proliferation; differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)
IT **Antigens**
Proteins
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)
(tumor-assocd.; differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)

IT **Vaccines**
(tumor; differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)

IT **Antitumor agents**
(vaccines; differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)

IT 444208-89-3 444210-02-0 444210-04-2 444210-07-5
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)

IT 444208-28-0 444208-29-1 444208-30-4 444208-31-5 444208-32-6
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RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleotide sequence; differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)

IT 444210-67-7 444210-68-8 444210-69-9 444210-70-2 444210-71-3
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RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleotide sequence; differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)
IT 444215-02-5 444215-03-6
RL: PRP (Properties)
(unclaimed nucleotide sequence; differentially expressed nucleic acid protein for the treatment and diagnosis of breast cancer)

L199 ANSWER 15 OF 23 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:861914 HCAPLUS
DOCUMENT NUMBER: 134:16535
TITLE: Test system for in-vitro detection of an antigen-specific immune response
INVENTOR(S): Jochmus, Ingrid; Nieland, John
PATENT ASSIGNEE(S): Medigene Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000073790	A1	20001207	WO 2000-EP5003	20000531 <--
W: AU, CA, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19925234	A1	20001214	DE 1999-19925234	19990601 <--
EP 1183533	A1	20020306	EP 2000-936845	20000531
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2003501628	T2	20030114	JP 2001-500861	20000531

PRIORITY APPLN. INFO.: DE 1999-19925234 A 19990601
WO 2000-EP5003 W 20000531

AB The invention relates to a test system comprising at least one capsomer, at least one stable capsomer, at least one capsid, at least one VLP and/or at least one CVLP and at least one target cell presenting an antigen, esp. a B cell, a macrophage, a predendritic cell, a **dendritic** cell, embryonal cell and/or fibroblast, which has been incubated with at least one capsomer, at least one stable capsomer, at least one capsid, at least one VLP and/or at least one CVLP, in order to detect an antigen-specific immune response in vitro, esp. a cellular immune response from effector cells of the immune system, esp. B cells, NK cells, preferably T cells, more preferably cytotoxic T cells or helper T cells. The invention also relates to the use thereof in diagnosis and therapy.
IC ICM G01N033-50
CC 15-2 (Immunochemistry)
ST papillomavirus antigen T lymphocyte autoimmunity tumor diagnosis
IT Animal cell line

(COS; prodn. of L1-contg. antigen in)
IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(E6; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(E7; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(E; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT **Histocompatibility antigens**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(HLA; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT Fusion proteins (chimeric proteins)
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(L1 protein-contg.; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(L1; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(L2; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT **Histocompatibility antigens**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MHC (major histocompatibility complex), class I; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT **Histocompatibility antigens**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MHC (major histocompatibility complex), class II; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT Sialoglycoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ZP3 (zona pellucida, 3), fusion protein with L1; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT Immunostimulants
(adjuvants; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT **Antigens**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(autoantigens, fusion protein with L1; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT Virion structure
(capsid; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)

IT Mammary gland
Ovary, neoplasm
(carcinoma; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT T cell (lymphocyte)
(cytotoxic; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT Hematopoietic precursor cell
(dendritic cell; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT Lymphocyte
(effector cell; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT Myelin
Thyroglobulin
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(fusion protein with L1; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT T cell (lymphocyte)
(helper cell; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT Lymphocyte
(natural killer cell; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT Escherichia coli
HeLa cell
Saccharomyces cerevisiae
Spodoptera frugiperda
Trichoplusia ni
(prodn. of L1-contg. **antigen** in)
IT Embryo, animal
(stem cell; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT **Antigen-presenting cell**
Autoimmune disease
B cell (lymphocyte)
Bovine papillomavirus
Cottontail rabbit papillomavirus
Cytolysis
Dendritic cell
Epitopes
Fibroblast
Human papillomavirus
Human papillomavirus 16
Immunotherapy
Macrophage
Melanoma
Mouse
Neoplasm
Papillomavirus
T cell (lymphocyte)
Vaccines
(test system for in-vitro detection of **antigen**-specific immune responses to papillomaviruses for diagnosis and therapy)
IT Peptides, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for diagnosis and therapy)
IT **Antigens**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(tumor-assocd., fusion protein with L1; test system for in-vitro detection of antigen-specific immune responses to papillomaviruses for

diagnosis and therapy)
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L199 ANSWER 16 OF 23 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:814317 HCAPLUS
DOCUMENT NUMBER: 133:361907
TITLE: Compositions and methods for identifying antigens which elicit an immune response
INVENTOR(S): Chen, Si-Yi; You, Zhaoyang
PATENT ASSIGNEE(S): Wake Forest University, USA
SOURCE: PCT Int. Appl., 164 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000067761	A1	20001116	WO 2000-US12177	20000505 <--
WO 2000067761	C2	20020906		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1178785	A1	20020213	EP 2000-928822	20000505
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000010322	A	20020409	BR 2000-10322	20000505
US 6500641	B1	20021231	US 2000-566420	20000505
JP 2003528573	T2	20030930	JP 2000-616786	20000505
US 2003166140	A1	20030904	US 2002-201764	20020722

PRIORITY APPLN. INFO.:			
US 1999-132750P	P	19990506	
US 1999-132752P	P	19990506	
US 2000-566420	A1	20000505	
WO 2000-US12177	W	20000505	

AB This invention relates to an expression vector wherein said expression vector comprises a polynucleotide promoter sequence, a polynucleotide encoding a signal sequence, a polynucleotide encoding an antigen protein or peptide, a polynucleotide encoding a cell binding element, and a polynucleotide polyadenylation sequence all operatively linked. More particularly, it relates to the method of eliciting an immune response directed against an antigen in a mammal comprising the steps of introducing the expression vector into a cell, expressing the vector to produce an antigen under conditions wherein the antigen is secreted from the cell, endocytosing the secreted antigen into the cell, processing the antigen, and presenting fragments to a receptor to elicit a T-cell response. In addn., this invention relates to a vaccine and a method of use. The invention also relates to the method of identifying MHC-II restricted epitopes.
IC ICM A61K031-71
ICS A61K035-76; A61K038-00; A61K038-20; A61K039-00; A61K039-002; A61K039-02; A61K039-12; A61K049-00; C07K014-00; C07H021-04; C12N005-00; C12N015-09; C12N015-63; C12N015-85; C12P021-00; C12Q001-00; C12Q001-68; G01N033-53
CC 15-2 (Immunochemistry)
Section cross-reference(s): 3, 63
ST antigen expression vector vaccine cancer infection
IT Intestine, disease
(Crohn's; compns. and methods for identifying antigens which elicit an immune response)

IT Hepatitis B virus
(E antigen; compns. and methods for identifying antigens which elicit an immune response)
IT Proteins, specific or class
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(E6, papilloma virus; compns. and methods for identifying antigens which elicit an immune response)
IT Transcription factors
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(E7, papilloma virus; compns. and methods for identifying antigens which elicit an immune response)
IT Immunoglobulins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(G; compns. and methods for identifying antigens which elicit an immune response)
IT Adeno-associated virus
(ITR sequence; compns. and methods for identifying antigens which elicit an immune response)
IT **Histocompatibility antigens**
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(MHC (major histocompatibility complex), class I; compns. and methods for identifying antigens which elicit an immune response)
IT **Histocompatibility antigens**
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(MHC (major histocompatibility complex), class II; compns. and methods for identifying antigens which elicit an immune response)
IT **Immunity**
(T cell-mediated; compns. and methods for identifying antigens which elicit an immune response)
IT Cell activation
(T cell; compns. and methods for identifying antigens which elicit an immune response)
IT T cell (lymphocyte)
(activation; compns. and methods for identifying antigens which elicit an immune response)
IT Receptors
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cell surface; compns. and methods for identifying antigens which elicit an immune response)
IT Toxins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cell-binding domain; compns. and methods for identifying antigens which elicit an immune response)
IT Genetic element
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cell-binding; compns. and methods for identifying antigens which elicit an immune response)
IT Uterus, neoplasm
(cervix; compns. and methods for identifying antigens which elicit an immune response)
IT Antigen-presenting cell
Antitumor agents
Autoimmune disease
CD4-positive T cell
CD8-positive T cell
Dendritic cell

Epitopes
Eukaryote (Eukaryotae)
Fungi
Hepatitis C virus
Human herpesvirus
Human herpesvirus 1
Human herpesvirus 2
Human herpesvirus 6
Human herpesvirus 7
Human herpesvirus 8
Human immunodeficiency virus
Human papillomavirus 16
Infection
Insect (Insecta)
Kidney, neoplasm
Mammal (Mammalia)
Melanoma
Molecular cloning
Multiple sclerosis
Muscle
Neoplasm
Papillomavirus
Pathogen
Prokaryote
Protein sequences
Psoriasis
Retroviral vectors
Rheumatoid arthritis
T cell (lymphocyte)
Vaccines
Virus
Virus vectors
Yeast
cDNA library
(compns. and methods for identifying antigens which elicit an immune response)

IT Polynucleotides
Promoter (genetic element)
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(compns. and methods for identifying antigens which elicit an immune response)

IT BCR (B cell receptors)
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(compns. and methods for identifying antigens which elicit an immune response)

IT Antibodies
Fusion proteins (chimeric proteins)
Gene, animal
Interleukin 2
Interleukin 5
Interleukin 6
Interleukins
Ligands
neu (receptor)
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. and methods for identifying antigens which elicit an immune response)

IT Simian virus 40
(early promoter; compns. and methods for identifying antigens which elicit an immune response)

IT Pseudomonas
(exotoxin; compns. and methods for identifying antigens which elicit an immune response)

IT Toxins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(exotoxins, pseudomonas; compns. and methods for identifying antigens which elicit an immune response)
IT Genetic vectors
(expression; compns. and methods for identifying antigens which elicit an immune response)
IT Immunoglobulins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fragments; compns. and methods for identifying antigens which elicit an immune response)
IT Animal virus
Bacteria (Eubacteria)
Parasite
(gene; compns. and methods for identifying antigens which elicit an immune response)
IT **Prostate-specific antigen**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(genetic promoter; compns. and methods for identifying antigens which elicit an immune response)
IT Glycoproteins, specific or class
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gp100; compns. and methods for identifying antigens which elicit an immune response)
IT Envelope proteins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(gp120env; compns. and methods for identifying antigens which elicit an immune response)
IT Envelope proteins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(gp160env; compns. and methods for identifying antigens which elicit an immune response)
IT Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(heavy chains, leader sequence; compns. and methods for identifying antigens which elicit an immune response)
IT **Antigens**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(hepatitis B core; compns. and methods for identifying antigens which elicit an immune response)
IT **Antigens**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(hepatitis B e; compns. and methods for identifying antigens which elicit an immune response)
IT Actins
Hemoglobins
Myosins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(human promoter; compns. and methods for identifying antigens which elicit an immune response)

IT Proteins, specific or class
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immediate-early, genetic promoter of Epstein-Barr virus; compns. and methods for identifying antigens which elicit an immune response)
IT Proteins, general, biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(intracellular; compns. and methods for identifying antigens which elicit an immune response)
IT Cytokines
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(leader sequence; compns. and methods for identifying antigens which elicit an immune response)
IT Genetic element
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(long terminal repeat, HIV promoter; compns. and methods for identifying antigens which elicit an immune response)
IT Animal cell
(mammalian; compns. and methods for identifying antigens which elicit an immune response)
IT **Antigens**
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(melanoma-assocd., MAGE-1; compns. and methods for identifying antigens which elicit an immune response)
IT **Antigens**
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(melanoma-assocd., MAGE-2; compns. and methods for identifying antigens which elicit an immune response)
IT **Antigens**
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(melanoma-assocd., MAGE-3; compns. and methods for identifying antigens which elicit an immune response)
IT **Antigens**
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(melanoma-assocd., MART; compns. and methods for identifying antigens which elicit an immune response)
IT Proteins, specific or class
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(membrane; compns. and methods for identifying antigens which elicit an immune response)
IT Mammary gland
Prostate gland
(neoplasm; compns. and methods for identifying antigens which elicit an immune response)
IT **Antigens**
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nuclear antigens, 1; compns. and methods for identifying antigens which elicit an immune response)
IT Drug delivery systems
(parenterals; compns. and methods for identifying antigens which elicit an immune response)
IT Protozoa
(pathogenic; compns. and methods for identifying antigens which elicit an immune response)
IT DNA sequences
(polyadenylation; compns. and methods for identifying antigens which elicit an immune response)

IT Avian leukemia virus
Cytomegalovirus
Human herpesvirus 4
Human immunodeficiency virus
Mouse mammary tumor virus
Murine leukemia virus
Rous sarcoma virus
(promoter; compns. and methods for identifying antigens which elicit an immune response)

IT Glucocorticoids
Metallothioneins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(promoter; compns. and methods for identifying antigens which elicit an immune response)

IT Secretion (process)
(protein; compns. and methods for identifying antigens which elicit an immune response)

IT B cell (lymphocyte)
(response epitope; compns. and methods for identifying antigens which elicit an immune response)

IT Genetic element
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(signal sequence; compns. and methods for identifying antigens which elicit an immune response)

IT Peptides, biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(small; compns. and methods for identifying antigens which elicit an immune response)

IT Animal tissue
(specific sequence; compns. and methods for identifying antigens which elicit an immune response)

IT Lupus erythematosus
(systemic; compns. and methods for identifying antigens which elicit an immune response)

IT Animal cell line
(tumor; compns. and methods for identifying antigens which elicit an immune response)

IT Infection
(viral; compns. and methods for identifying antigens which elicit an immune response)

IT Gene, microbial
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(viral; compns. and methods for identifying antigens which elicit an immune response)

IT 9002-10-2P, Tyrosinase 83869-56-1P, GM-CSF
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(compns. and methods for identifying antigens which elicit an immune response)

IT 57-00-1 57-83-0, Progesterone, biological studies 60-54-8, Tetracycline
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(promoter; compns. and methods for identifying antigens which elicit an immune response)

IT 307008-27-1, 1: PN: WO0067761 SEQID: 1 unclaimed DNA 307008-28-2, 2: PN: WO0067761 SEQID: 2 unclaimed DNA 307008-29-3, 3: PN: WO0067761 SEQID: 3 unclaimed DNA 307008-30-6, 4: PN: WO0067761 SEQID: 4 unclaimed DNA 307008-31-7, 5: PN: WO0067761 SEQID: 5 unclaimed DNA 307008-32-8, 6: PN: WO0067761 SEQID: 6 unclaimed DNA 307008-33-9, 7: PN: WO0067761 SEQID: 7 unclaimed DNA 307008-34-0, 8: PN: WO0067761 SEQID: 8 unclaimed DNA 307008-35-1, 9: PN: WO0067761 SEQID: 9 unclaimed DNA 307008-36-2 307008-37-3 307008-38-4 307008-39-5 307008-40-8 307008-41-9

307008-43-1
RL: PRP (Properties)
(unclaimed nucleotide sequence; compns. and methods for identifying antigens which elicit an immune response)
IT 307008-42-0
RL: PRP (Properties)
(unclaimed protein sequence; compns. and methods for identifying antigens which elicit an immune response)
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L199 ANSWER 17 OF 23 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:742251 HCAPLUS
DOCUMENT NUMBER: 133:294918
TITLE: Antigens of breast cancer tissue, cDNAs encoding them, and their use in the prevention, diagnosis and treatment of the disease
INVENTOR(S): Reed, Steven G.; Xu, Jiangchun; Dillon, Davin C.
PATENT ASSIGNEE(S): Corixa Corporation, USA
SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000061756	A2	20001019	WO 2000-US9688	20000410 <--
WO 2000061756	A3	20010208		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6410507	B1	20020625	US 1999-346327	19990702
BR 2000009608	A	20020108	BR 2000-9608	20000410
EP 1169446	A2	20020109	EP 2000-922073	20000410
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002541805	T2	20021210	JP 2000-611679	20000410
NO 2001004804	A	20011115	NO 2001-4804	20011003

PRIORITY APPLN. INFO.:
US 1999-288950 A 19990409
US 1999-346327 A 19990702
US 1997-998253 B2 19971224
US 1998-118627 A2 19980717
US 1999-248178 A2 19990209
WO 2000-US9688 W 20000410

AB Compns. and methods for the treatment and diagnosis of breast cancer, are provided. Specifically, antigenic proteins specific to breast cancer tissue that can be used as diagnostic markers or in vaccines are described. CDNAs specific to breast cancer tissue were identified by subtractive hybridization. Some of the cDNAs.
IC ICM C12N015-12
ICS C12N015-62; C07K014-47; C07K016-18; A61K035-12; A61K038-17; A61K039-00; A61P035-00; G01N033-53; C12Q001-68; A61K048-00
CC 14-1 (Mammalian Pathological Biochemistry)
Section cross-reference(s): 3
ST antigen breast cancer diagnosis vaccine immunotherapy; sequence breast cancer specific antigen
IT **Epitopes**
(T helper cell, fusion products with breast cancer antigens; antigens of breast cancer tissue, cDNAs encoding them, and their use in

prevention, diagnosis and treatment of disease)
IT Fusion proteins (chimeric proteins)
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(breast cancer antigen, for vaccine use; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)
IT B cell (lymphocyte)
Dendritic cell
Fibroblast
Macrophage
Monocyte
(breast cancer antigens for presentation by; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)
IT Gene, animal
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cDNA, for breast cancer antigens; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)
IT Diagnosis
(cancer, of breast cancer; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)
IT Escherichia coli
Yeast
(expression host; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)
IT Immunoassay
(for antigens of breast cancer in diagnosis and prognosis; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)
IT Nucleic acid hybridization
PCR (polymerase chain reaction)
(for detection of mammary cancer-specific ESTs; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)
IT Primers (nucleic acid)
Probes (nucleic acid)
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(for detection of mammary cancer-specific ESTs; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)
IT Test kits
(for diagnosis and monitoring of breast cancer; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)
IT Immunoglobulins
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(fragments, to breast cancer-specific antigens; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)
IT T cell (lymphocyte)
(helper cell, epitopes for, fusion products with breast cancer antigens; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)
IT Latex
(immobilization of antibodies to breast cancer-specific antigens on; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)
IT Plastics, uses
RL: DEV (Device component use); USES (Uses)
(immobilization of antibodies to breast cancer-specific antigens on; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)

IT Antibodies
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(immobilized, to breast cancer-specific antigens; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)

IT Diagnosis
(immunodiagnosis, of breast cancer; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)

IT Blood analysis
(in diagnosis of breast cancer; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)

IT Animal cell
(mammalian, expression host; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)

IT Diagnosis
(mol., of breast cancer; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)

IT Antibodies
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(monoclonal, to antigens of breast cancer; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)

IT Mammary gland
(neoplasm; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)

IT cDNA sequences
(of ESTs of breast cancer tissue of human; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)

IT **Immunotherapy**
(of breast cancer, antigens for; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)

IT CD4-positive T cell
CD8-positive T cell
(stimulation with breast cancer antigens; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)

IT Antibodies
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(to breast cancer-specific antigens; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)

IT **Vaccines**
Vaccines
(tumor, breast cancer, tumor specific antigens for; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)

IT **Antigens**
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(tumor-assocd., of breast cancer; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)

IT **Antitumor agents**
Antitumor agents
(vaccines, breast cancer, tumor specific antigens for; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)

IT 212130-23-9 230288-85-4 230288-86-5 230288-87-6 230288-89-8
230288-90-1 230288-91-2 230288-94-5 230288-96-7 230288-98-9
230289-00-6 230289-01-7 230289-02-8 230289-03-9 230289-04-0
230289-10-8 230289-14-2 230289-16-4 230289-17-5 230289-19-7
230289-20-0 230289-21-1 230289-22-2 230289-23-3 230289-24-4
230289-26-6 230289-28-8 230289-29-9 230289-30-2 230289-31-3
230289-34-6 230289-35-7 230289-36-8 230289-38-0 230289-39-1
230289-44-8 230289-45-9 230289-46-0 230289-47-1 230289-48-2
230289-49-3 230289-50-6 230289-51-7 230289-52-8 230289-53-9
230289-54-0 230289-56-2 230289-57-3 230289-59-5 230289-60-8
230289-61-9 230289-62-0 230289-65-3 230289-66-4 230289-69-7
230289-72-2 230289-73-3 230289-74-4 230289-75-5 230289-76-6
230289-77-7 230289-78-8 230289-79-9 230289-80-2 230289-81-3
230289-85-7 301244-96-2 301244-97-3 301244-98-4 301244-99-5
301245-00-1 301245-01-2 301245-02-3 301245-03-4 301245-04-5
301245-05-6 301245-06-7 301245-07-8 301245-08-9 301245-09-0
301245-10-3 301245-11-4 301245-12-5 301245-13-6 301245-14-7
301245-15-8 301245-16-9 301245-17-0 301245-18-1 301245-19-2
301245-20-5 301245-21-6 301245-22-7 301245-23-8 301245-24-9
301245-25-0 301245-26-1 301245-27-2 301245-28-3 301245-29-4
301245-30-7 301245-31-8 301245-32-9 301245-33-0
RL: BSU (Biological study, unclassified); PRP (Properties); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleotide sequence; antigens of breast cancer tissue, cDNAs encoding them, and their use in prevention, diagnosis and treatment of disease)
IT 207624-44-0, BS106 protein (human fragment) 212130-26-2 250590-62-6
RL: PRP (Properties)
(unclaimed protein sequence; antigens of breast cancer tissue, cDNAs encoding them, and their use in the prevention, diagnosis and treatment of the disease)

L199 ANSWER 18 OF 23 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:402017 HCAPLUS
DOCUMENT NUMBER: 133:54574
TITLE: Recombinant vectors expressing multiple costimulatory molecules, host cell infection, and uses in immunogenic applications
INVENTOR(S): Schlom, Jeffrey; Hodge, James; Panicali, Dennis
PATENT ASSIGNEE(S): United States Dept. of Health and Human Services, USA; Therion Biologics Corporation
SOURCE: PCT Int. Appl., 188 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000034494	A1	20000615	WO 1999-US26866	19991112 <--
EP 1137792	A1	20011004	EP 1999-958951	19991112
JP 2002531133	T2	20020924	JP 2000-586927	19991112

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: US 1998-111582P P 19981209
WO 1999-US26866 W 19991112

AB The present invention provides recombinant vectors encoding and expressing at least three or more costimulatory mols and host cells infected by the

vector. The recombinant vector may addnl. contain a gene encoding one or more target antigens or immunol. epitope as well as cytokine, chemokine, or Flt-3L. A method of making a recombinant poxvirus, of enhancing an immune response of an individual by administering a recombinant vector, and of treating or preventing a disease by activating a T lymphocyte, are also presented. Further describes are a method of making a progenitor **dendritic** cell or **dendritic** cell, of assessing the efficacy of a vaccine against a target antigen, and of screening for novel immunogenic peptides. The synergistic effect of these costimulatory mols. on the enhanced activation of T cells was demonstrated. The degree of T-cell activation using recombinant vectors contg. genes encoding three costimulatory mols. was far greater than the sum of recombinant vector constructs contg. one costimulatory mol. and greater than the use of two costimulatory mols. Results employing the triple costimulatory vectors were most dramatic under conditions of either low levels of first signal or low stimulator to T-cell ratios. This phenomenon was obsd. with both isolated CD4+ and CD8+ T cells. The recombinant vectors of the present invention are useful as immunogenes and vaccines against cancer and pathogenic micro-organisms, and in providing host cells, including **dendritic** cells and splenocytes with enhanced antigen-presenting functions.

IC ICM C12N015-86
ICS C12N005-10; C07K014-705; A61K039-00; A61K035-76; C12Q001-00

CC 3-5 (Biochemical Genetics)
Section cross-reference(s): 10, 13, 15

ST vector costimulatory mol antigen epitope T cell activation therapy

IT **Antigens**
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(17-1A, as tumor- or tissue specific antigen; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Promoter (genetic element)
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(30K; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT **Antigens**
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(4-1BBL; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Promoter (genetic element)
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(40K; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Promoter (genetic element)
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(7.5K; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(BRCA1, tumor- or tissue specific antigen encoded by; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Transcription factors
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(BRCA2, as tumor- or tissue specific antigen; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Promoter (genetic element)
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(C1; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(CA-125, as tumor- or tissue specific antigen; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT **Antigens**
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(CD70; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT **Carcinoembryonic antigen**
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(CEA(6D), with Asp at the position 576; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(EWS, fli-1, tumor- or tissue specific antigen encoded by; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(Flt-3L; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(GP-100, as tumor- or tissue specific antigen; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Promoter (genetic element)
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(I3; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Cell adhesion molecules
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(ICAM-1 (intercellular adhesion mol. 1); recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(MAGE-1, as tumor- or tissue specific antigen; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(MAGE-3, as tumor- or tissue specific antigen; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(MART-1, as tumor- or tissue specific antigen; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); THU

(Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(MUC-1, as tumor- or tissue specific antigen; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(MUC-2, as tumor- or tissue specific antigen; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(NY-ESO-1, as tumor- or tissue specific antigen; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT **Antigens**
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(OX-40L; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(PAX3, fkhr, tumor- or tissue specific antigen encoded by; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(PSMA, as tumor- or tissue specific antigen; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(TAA, as tumor- or tissue specific antigen; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(TAG72, as tumor- or tissue specific antigen; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(TP53, tumor- or tissue specific antigen encoded by; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(TRP-1 (tyrosinase-related protein 1), as tumor- or tissue specific antigen; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(TRP-2 (tyrosinase-related protein 2), as tumor- or tissue specific antigen; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Cell adhesion molecules
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(VCAM-1; recombinant vectors expressing multiple costimulatory mols.,

host cell infection, and uses in immunogenic applications)
IT Bone marrow
Lymph node
Muscle
Neoplasm
Skin
Spleen
(antigen presenting cell derived from, expression host; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)
IT Animal tissue
Bacteria (Eubacteria)
Fungi
Neoplasm
Parasite
Protozoa
Virus
Yeast
(antigene specific to; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)
IT Chlamydia
Haemophilus influenzae
Legionella
Listeria
Mycobacterium
Salmonella
Streptococcus
(bacterial antigen derived from; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)
IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(bcr-c-abl, tumor- or tissue specific antigen encoded by; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)
IT Gene, animal
Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(c-erbB2, tumor- or tissue specific antigen encoded by; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)
IT Neoplasm
(cell line derived from, expression host; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)
IT Simian virus 40
(early promoter of; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)
IT Promoter (genetic element)
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(early, of SV40 virus; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)
IT **Antigen-presenting cell**
B cell (lymphocyte)
Dendritic cell
Fibroblast
Macrophage
Monocyte
(expression host; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)
IT **CD40 (antigen)**

Tumor necrosis factors
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(for dendritic cell treatment; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Gene, microbial
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(gpt, as genetic marker; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Human herpesvirus 5
(human, immediate early promoter of; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Promoter (genetic element)
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(immediate early, I, of human CMV; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Gene, microbial
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(lacZ, as genetic marker; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Adenoviridae
(major late promoter of; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Promoter (genetic element)
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(major late, of adenovirus; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Aspergillus
Candida
Cryptosporidium
Histoplasma capsulatum
Leishmania
Nocardia
Plasmodium (malarial genus)
Pneumocystis carinii
Toxoplasma gondii
(microbial **antigen** derived from; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Cell activation
Cell proliferation
(of T lymphocyte; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Plasmid vectors
(pT5049; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Plasmid vectors
(pT5064; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Blood
(peripheral, antigen presenting cell derived from, expression host; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Eukaryote (Eukaryotae)
Poxviridae
Prokaryote

Rous sarcoma virus
Virus
(promoter of; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(ras, tumor- or tissue specific antigen encoded by; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT CD4-positive T cell
CD8-positive T cell
Cytotoxicity
Drug delivery systems
Drug screening
Epitopes
Gene therapy
Genetic markers
Genetic vectors
Mitogens
Peptide library
Plasmid vectors
Recombination
Vaccines
Virus vectors
(recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT **CD40 (antigen)**
CD59 (antigen)
CD80 (antigen)
CD86 (antigen)
Carcinoembryonic antigen
Chemokines
Cytokines
LFA-3 (antigen)
Prostate-specific antigen
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Promoter (genetic element)
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(sE/L; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Gene, microbial
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(tk, as genetic marker; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Gene, microbial
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(uidA, as genetic marker; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Interleukin 2
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(vaccine enhancement by; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Gene, microbial
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(vaccinia K1L host range, as genetic marker; recombinant vectors

expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Cytomegalovirus
Hepatitis A virus
Hepatitis B virus
Hepatitis C virus
Hepatitis E virus
Hepatitis delta virus
Hepatitis virus
Herpesviridae
Human herpesvirus
Human immunodeficiency virus 2
Influenza virus
Lentivirus
Orthomyxovirus
Papillomavirus
(viral antigen derived from; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Alphavirus
Avipoxvirus
Canarypox virus
Capripoxvirus
Fowlpox virus
Herpesviridae
Iridovirus
Orthopoxvirus
Picornaviridae
Retroviridae
Suipoxvirus
Vaccinia virus
(viral vector based on; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT Interferons
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(.gamma., vaccine enhancement by; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT 129437-45-2 144449-86-5 154330-44-6 154330-45-7 154652-68-3
156250-91-8 156251-11-5 156761-76-1 160040-04-0 160212-35-1
160214-78-8 160215-60-1 160790-21-6 160983-12-0 162558-12-5
162558-13-6 166188-11-0 167319-68-8 168635-85-6 169896-35-9
170173-06-5 170294-35-6 174881-39-1 175614-17-2 177333-26-5
180695-71-0 186351-24-6 187968-34-9 188191-49-3 188606-63-5
189170-01-2 197146-50-2 198274-43-0 275793-89-0 275793-90-3
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; Recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT 9002-10-2, Tyrosinase
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(as tumor- or tissue specific antigen; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT 276687-08-2
RL: PRP (Properties)
(unclaimed protein sequence; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic applications)

IT 132326-74-0 138831-86-4 145253-17-4 276236-70-5
RL: PRP (Properties)
(unclaimed sequence; recombinant vectors expressing multiple costimulatory mols., host cell infection, and uses in immunogenic

applications)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L199 ANSWER 19 OF 23 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:614132 HCAPLUS
DOCUMENT NUMBER: 131:253353
TITLE: Tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer
INVENTOR(S): Reed, Steven G.; Wang, Tongtong
PATENT ASSIGNEE(S): Corixa Corporation, USA
SOURCE: PCT Int. Appl., 148 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 14
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
WO 9947674	A2	19990923	WO 1999-US5798	19990317	<--
WO 9947674	A3	20000120			
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
US 6210883	B1	20010403	US 1998-40984	19980318	
US 6312695	B1	20011106	US 1998-123912	19980727	
CA 2323093	AA	19990923	CA 1999-2323093	19990317	<--
AU 9930949	A1	19991011	AU 1999-30949	19990317	<--
BR 9908823	A	20001121	BR 1999-8823	19990317	<--
EP 1064372	A2	20010103	EP 1999-912607	19990317	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
JP 2002533056	T2	20021008	JP 2000-536857	19990317	
US 2003119763	A1	20030626	US 1999-466396	19991217	
US 6482597	B1	20021119	US 2000-480884	20000110	
US 6518256	B1	20030211	US 2000-542615	20000404	
US 6531315	B1	20030311	US 2000-606421	20000628	
NO 2000004631	A	20001115	NO 2000-4631	20000915	<--

PRIORITY APPLN. INFO.:

US 1998-40802	A	19980318
US 1998-40984	A	19980318
US 1998-123912	A	19980727
US 1998-123933	A	19980727
US 1998-221107	A1	19981222
WO 1999-US5798	W	19990317
US 1999-285479	A2	19990402
US 1999-466396	A2	19991217
US 1999-476496	A2	19991230
US 2000-480884	A2	20000110
US 2000-510376	A2	20000222
US 2000-542615	A2	20000404

AB Compds. and methods for the treatment and diagnosis of lung cancer are provided. The inventive compds. include polypeptides contg. at least a portion of a lung tumor protein. Thus, 70 cDNA sequences were isolated from a human lung squamous cell carcinoma cDNA expression library and tumor-specific polypeptide-encoding cDNAs identified by subtraction with normal lung cDNA libraries and a cDNA library from normal liver and heart; an addnl. 16 cDNA clones were identified from a lung adenocarcinoma library. Vaccines and pharmaceutical compns. for immunotherapy of lung cancer comprising such polypeptides, or DNA mols. encoding such polypeptides, are also provided, together with DNA mols. for prepg. the inventive polypeptides.

IC ICM C12N015-12
ICS A61K038-17; C07K014-47; C07K016-18; A61K035-14
CC 3-3 (Biochemical Genetics)
Section cross-reference(s): 1, 6, 14
ST tumor antigen cDNA lung cancer human; vaccine immunotherapy lung cancer reagent
IT Connexins
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(26; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)
IT Keratins
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(6; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)
IT Lung, neoplasm
(adenocarcinoma; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)
IT Immunostimulants
(adjuvants; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)
IT Diagnosis
(cancer; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)
IT Escherichia coli
Yeast
(expression host; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)
IT Molecular cloning
(expression systems; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)
IT Proteins, specific or class
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(gene NMB; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)
IT Lung, neoplasm
Lung, neoplasm
(inhibitors; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)
IT **Antitumor agents**
Antitumor agents
(lung; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)
IT Animal cell
(mammalian, expression host; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)
IT Antibodies
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(monoclonal; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)
IT Proteins, specific or class
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(plakophilin 1; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)
IT Lung, neoplasm
(squamous cell carcinoma; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)
IT Antigen-presenting cell
CD4-positive T cell

CD8-positive T cell
Dendritic cell
Macrophage
T cell (lymphocyte)
(treatment with proliferated; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)

IT **Antigens**
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(tumor-assocd.; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)

IT Lung, neoplasm
PCR (polymerase chain reaction)
Protein sequences
Vaccines
cDNA sequences
(tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)

IT Antibodies
Primers (nucleic acid)
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)

IT Fusion proteins (chimeric proteins)
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)

IT 112024-77-8, Humoral hypercalcemic factor (human clone BRF.61 precursor) 160478-25-1 244614-96-8 244615-06-3 244776-64-5 244776-67-8 244776-68-9 244776-71-4 244776-73-6 245058-16-6 245058-17-7 245058-19-9
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(amino acid sequence; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)

IT 9028-31-3, Aldose reductase 103370-86-1, Parathyroid hormone-related peptide
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(homolog; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)

IT 244259-49-2 244259-76-5 244259-77-6 244259-78-7 244259-79-8
244259-80-1 244259-81-2 244259-82-3 244259-83-4 244259-84-5
244259-85-6 244259-86-7 244259-87-8 244259-88-9 244259-89-0
244259-96-9 244259-97-0 244259-98-1 244259-99-2 244260-00-2
244260-01-3 244260-02-4 244260-03-5 244260-04-6 244260-05-7
244260-06-8 244260-07-9 244260-08-0 244260-09-1 244260-10-4
244260-11-5 244260-13-7 244260-14-8 244260-15-9 244260-18-2
244260-19-3 244260-20-6 244260-21-7 244260-22-8 244260-23-9
244260-24-0 244260-25-1 244260-26-2 244260-27-3 244260-28-4
244609-06-1 244609-07-2 244609-08-3 244609-09-4 244609-10-7
244609-11-8 244609-12-9 244609-13-0 244609-14-1 244609-15-2
244609-16-3 244609-17-4 244609-18-5 244609-19-6 244609-20-9
244609-21-0 244609-22-1 244609-25-4 244609-34-5 244609-35-6
244609-36-7 244609-37-8 244609-38-9 244609-39-0 244609-40-3
244609-41-4 244609-42-5 244609-43-6 244609-44-7 244609-45-8
244609-46-9 244609-47-0 244609-48-1 244609-49-2 244609-50-5
244609-51-6 244609-52-7 244609-53-8 244609-54-9 244609-55-0
244609-56-1 244609-57-2 244609-58-3 244609-59-4 244609-60-7
244609-61-8 244609-62-9 244609-63-0 244609-64-1 244609-65-2
244609-66-3 244609-67-4 244609-68-5 244609-69-6 244609-70-9
244609-71-0 244609-72-1 244609-73-2 244609-74-3 244609-77-6
244609-78-7 244609-79-8 244609-80-1 244609-81-2 244614-97-9

244615-07-4 244615-08-5 244615-09-6 244615-10-9 244615-11-0
244615-13-2 244615-17-6 244615-18-7 244615-19-8 244615-20-1
244615-21-2 244615-22-3 244774-98-9 244774-99-0 244775-00-6
244775-01-7 244775-02-8 244775-03-9 244775-04-0 244775-05-1
244775-06-2 244775-07-3 244775-08-4 244775-09-5 244775-10-8
244775-11-9 244775-12-0 244775-13-1 244776-54-3 244776-55-4
244776-56-5 244776-57-6 244776-58-7 244776-59-8 244776-60-1
244776-61-2 244776-62-3 244776-63-4 244776-65-6 244776-66-7
244776-69-0 244776-70-3 244776-72-5 244776-74-7 244776-75-8
245058-13-3 245058-14-4 245058-15-5 245058-18-8
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(nucleotide sequence; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)

IT 61912-98-9, Insulin-like growth factor
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(.beta.2; tumor-specific polypeptide-encoding nucleic acids and methods for therapy and diagnosis of lung cancer)

L199 ANSWER 20 OF 23 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:388597 HCAPLUS
DOCUMENT NUMBER: 129:53352
TITLE: Cellular adjuvant
INVENTOR(S): Luft, Thomas; Pang, Kenneth; Le Thomas, Elizabeth; Cebon, Jonathan Simon
PATENT ASSIGNEE(S): Ludwig Institute for Cancer Research, Australia; Luft, Thomas; Pang, Kenneth; Le Thomas, Elizabeth; Cebon, Jonathan Simon
SOURCE: PCT Int. Appl., 85 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
WO 9823728	A1	19980604	WO 1997-AU801	19971127	<--
W: AU, CA, JP, US					
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
AU 9850415	A1	19980622	AU 1998-50415	19971127	<--
AU 718873	B2	20000420			
EP 941309	A1	19990915	EP 1997-913011	19971127	<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					

PRIORITY APPLN. INFO.: AU 1996-3883 A 19961127
WO 1997-AU801 W 19971127

AB This invention relates to a method of maturation of **dendritic** cells in vitro a serum-free medium in the presence of cytokine, e.g type I interferon following an initial phase of growth in the presence of GM-CSF, TNF-.alpha. and interleukin 4. The disclosed **dendritic** cells include Langerhans cells or other tissue **antigen-presenting cells** and are derived from mononuclear cells, esp. CD34+ hematopoietic progenitor cells. The cellular adjuvant is used together with tumor-assocd. antigens or antigens for treating neoplastic or infectious diseases.

IC ICM C12N001-38
ICS C12N005-02; C12N005-08
CC 15-2 (Immunochemistry)
ST antigen vaccine immune adjuvant dendritic cell
IT **CD1 (antigen)**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(CD1a, weak expression; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)

IT Hematopoietic precursor cell
(CD34+; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)
IT **Antigens**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(CD83 marker; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)
IT **Antigens**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(CMR44 marker; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)
IT Skin
(Langerhans' cell; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)
IT **Histocompatibility antigens**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(MHC (major histocompatibility complex), class I, marker; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)
IT **Histocompatibility antigens**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(MHC (major histocompatibility complex), class II, marker; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)
IT T cell (lymphocyte)
(activated; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)
IT Immunostimulants
(adjuvants, cellular; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)
IT Testis, neoplasm
(antigen; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)
IT Integrins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antigens CD11b, weak expression; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)
IT Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(consensus; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)
IT T cell (lymphocyte)
(cytotoxic; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)
IT Hemopoietins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(flt-3; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)
IT Glycoproteins, specific or class
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gp100; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)
IT Bacteria (Eubacteria)
Parasite
Yeast
(infection; maturation of **dendritic cells** as immune adjuvant for treating neoplastic and infectious diseases)
IT Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(interferon .omega.; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)
IT **CD80 (antigen)**
CD86 (antigen)
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(marker; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)
IT **Antigen-presenting cell**

Dendritic cell
Infection
Leukocyte
Lymphocyte
Mammal (Mammalia)
Mononuclear cell (leukocyte)
Neoplasm
Vaccines
(maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)

IT Cytokines
Interleukin 4
Nucleic acids
Peptides, biological studies
Polysaccharides, biological studies
Proteins, general, biological studies
Stem cell factor
Tumor necrosis factors
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)

IT **Antigens**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(melanoma-assocd., Melan A; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)

IT Blood
(peripheral progenitor cells; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)

IT Bone marrow
(progenitor cells; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)

IT Culture media
(serum-free; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)

IT Embryo, animal
(stem cell; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)

IT **Antigens**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-assocd., MAGE family; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)

IT **Antigens**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-assocd.; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)

IT Infection
(viral; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)

IT Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha.-2a; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)

IT Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha./.beta.; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)

IT Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha.8; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)

IT Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha.; maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)

IT Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.beta.; maturation of dendritic cells as immune adjuvant for treating

neoplastic and infectious diseases)
IT 9002-10-2, Tyrosinase 83869-56-1, GM-CSF 143011-72-7, G-CSF
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(maturation of dendritic cells as immune adjuvant for treating neoplastic and infectious diseases)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L199 ANSWER 21 OF 23 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1996:446736 HCAPLUS
DOCUMENT NUMBER: 125:76427
TITLE: Yeast-based delivery vehicles for protection from disease
INVENTOR(S): Duke, Richard C.; Franzusoff, Alex; Bellgrau, Donald
PATENT ASSIGNEE(S): Regents of the University of Colorado, USA
SOURCE: PCT Int. Appl., 107 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9614876	A1	19960523	WO 1995-US14881	19951115 <--
W: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5830463	A	19981103	US 1994-340185	19941115 <--
AU 9642835	A1	19960606	AU 1996-42835	19951115 <--
EP 789593	A1	19970820	EP 1995-941401	19951115 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 10510246	T2	19981006	JP 1995-516320	19951115 <--

PRIORITY APPLN. INFO.:
US 1994-340185 19941115
US 1993-88322 19930707
WO 1995-US14881 19951115

AB The present invention includes yeast vehicles and their use as delivery vehicles. Yeast vehicles include a yeast portion and a heterologous compd. Such yeast vehicles can be used to protect animals or plants from disease and to otherwise carry compds. to given cell types. Examples of yeast vehicles include gene delivery vehicles, drug delivery vehicles, and immunomodulatory vehicles. Immunomodulatory vehicles are capable of modulating an immune response. When stimulating an immune response, such yeast vehicles effect cell-mediated as well as humoral immunity. Yeast vehicle prodn. is described, as are demonstration of immunostimulating (cell-mediated and humoral) activity and yeast vehicle safety.
IC ICM A61K048-00
ICS C12N015-00
CC 1-12 (Pharmacology)
Section cross-reference(s): 11, 63
ST yeast delivery vehicle therapeutic animal plant; drug immunomodulator yeast delivery vehicle
IT **Vaccines**
(Macaque monkey vaccination; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Bacteria
Fungi
Neoplasm
Parasitic worm
Protozoa
Virus
(antigens; yeast-based delivery vehicles for protection of plants and animals from disease)

IT Connective tissue
Epithelium
(cell; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Gene
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(defective, compds. replacing; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Transcription, genetic
Translation, genetic
(inhibitors; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Receptors
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ligands; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Animal cell
(mammalian cell-surface mols.; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Primate
Rodent
(method to test yeast vehicle to elicit protective immune response against disease)
IT Membrane, biological
(particles; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Inorganic compounds
Organic compounds, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(protective; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Transplant and Transplantation
(rejection; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Macaca
(vaccination of; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Allergy inhibitors
Anemia (disease)
Animal tissue culture
Anthelmintics
Anti-infective agents
Arthropod
Autoimmune disease
Bactericides, Disinfectants, and Antiseptics
Candida
Candida albicans
Cardiovascular agents
Cryptococcus (fungus)
Cytotoxic agents
Fungicides and Fungistats
Fusion, biological
Hansenula
Immunodeficiency
Immunomodulators
Immunostimulants
Immunosuppressants
Inflammation inhibitors
Kluyveromyces
Lymphocyte
Monocyte
Myoblast
Neoplasm inhibitors
Nerve
Neutrophil
Pharmaceuticals
Pichia

Pichia angusta
Pichia pastoris
Plant
Plant tissue culture
Prion
Protoplast and Spheroplast
Protozoacides
Rhodotorula
Saccharomyces
Saccharomyces cerevisiae
Schizosaccharomyces
Schizosaccharomyces pombe
Therapeutics
Viroid
Virucides and Virustats
Yarrowia
Yeast
(yeast-based delivery vehicles for protection of plants and animals from disease)

IT Antibodies
Antigens
Carbohydrates and Sugars, biological studies
Lipids, biological studies
Nucleic acids
Peptides, biological studies
Proteins, biological studies
Ribonucleic acids
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(yeast-based delivery vehicles for protection of plants and animals from disease)

IT Lymphocyte
(B-cell, yeast-based delivery vehicles for protection of plants and animals from disease)

IT **Antigens**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**CD4**, cells expressing; yeast-based delivery vehicles for protection of plants and animals from disease)

IT **Antigens**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**CD8**, cells expressing; yeast-based delivery vehicles for protection of plants and animals from disease)

IT **Antigens**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**Fas** ligand, yeast-based delivery vehicles for protection of plants and animals from disease)

IT Lymphocyte
(T-cell, yeast-based delivery vehicles for protection of plants and animals from disease)

IT Plant
(angiospermous, yeast-based delivery vehicles for protection of plants and animals from disease)

IT **Immunity**
(cell-mediated, yeast-based delivery vehicles for protection of plants and animals from disease)

IT Cytoplasm
(cytoplast, yeast-based delivery vehicles for protection of plants and animals from disease)

IT **Leukocyte**
(**dendritic cell**, yeast-based delivery vehicles for protection of plants and animals from disease)

IT Hematopoiesis
(disorder, yeast-based delivery vehicles for protection of plants and animals from disease)

IT Parasite
(ecto-, yeast-based delivery vehicles for protection of plants and animals from disease)

IT Blood vessel

(endothelium, cell; yeast-based delivery vehicles for protection of plants and animals from disease)
IT Muscle
(fiber, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Disease
(genetic, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Therapeutics
(geno-, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Glycoproteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(gp160env, HIV, heterologous nucleic acid encoding; method to test yeast vehicle to elicit protective immune response against disease)
IT Leukocyte
(granulocyte, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Liver
(hepatocyte, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Virus, animal
(human immunodeficiency, gp160, heterologous nucleic acid encoding; method to test yeast vehicle to elicit protective immune response against disease)
IT **Immunity**
(humoral, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Disease
(immunoproliferative, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Nucleotides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligo-, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Lung
(pneumonocyte, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Hematopoietic precursor cell
(stem, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Thymus gland
(thymocyte, yeast-based delivery vehicles for protection of plants and animals from disease)
IT Animal
(vertebrate, yeast-based delivery vehicles for protection of plants and animals from disease)
IT 9001-92-7, Endoprotease
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(yeast strain deficient in; yeast-based delivery vehicles for protection of plants and animals from disease)

=> d ibib abs 22-23

L199 ANSWER 22 OF 23 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2000-271444 [23] WPIDS
DOC. NO. NON-CPI: N2000-203228
DOC. NO. CPI: C2000-082936
TITLE: In vivo down-regulation of osteoprotegerin ligand (**OPGL**) activity used to treat, prevent and ameliorate osteoporosis.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): HAANING, J; HALKIER, T
PATENT ASSIGNEE(S): (MEBI-N) M & E BIOTECH AS; (PHAR-N) PHARMEXA AS
COUNTRY COUNT: 89
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000015807	A1	20000323	(200023)*	EN	110 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW					
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW					
AU 9956173	A	20000403	(200034)		<--
NO 2001001304	A	20010515	(200137)		
EP 1114166	A1	20010711	(200140)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SI					
CZ 2001000789	A3	20010815	(200157)		
CN 1318105	A	20011017	(200213)		
SK 2001000306	A3	20020205	(200213)		
KR 2001085807	A	20010907	(200218)		
HU 2001003578	A2	20020128	(200222)		
ZA 2001002131	A	20020828	(200264)		153
JP 2002525060	W	20020813	(200267)		104
AU 754971	B	20021128	(200306)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000015807	A1	WO 1999-DK481	19990913
AU 9956173	A	AU 1999-56173	19990913
NO 2001001304	A	WO 1999-DK481	19990913
		NO 2001-1304	20010314
EP 1114166	A1	EP 1999-942778	19990913
		WO 1999-DK481	19990913
CZ 2001000789	A3	WO 1999-DK481	19990913
		CZ 2001-789	19990913
CN 1318105	A	CN 1999-810872	19990913
SK 2001000306	A3	WO 1999-DK481	19990913
		SK 2001-306	19990913
KR 2001085807	A	KR 2001-703379	20010315
HU 2001003578	A2	WO 1999-DK481	19990913
		HU 2001-3578	19990913
ZA 2001002131	A	ZA 2001-2131	20010314
JP 2002525060	W	WO 1999-DK481	19990913
		JP 2000-570334	19990913
AU 754971	B	AU 1999-56173	19990913

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9956173	A	Based on	WO 2000015807
EP 1114166	A1	Based on	WO 2000015807
CZ 2001000789	A3	Based on	WO 2000015807
SK 2001000306	A3	Based on	WO 2000015807
HU 2001003578	A2	Based on	WO 2000015807
JP 2002525060	W	Based on	WO 2000015807
AU 754971	B	Previous Publ.	AU 9956173
		Based on	WO 2000015807

PRIORITY APPLN. INFO: US 1998-102896P 19981002; DK 1998-1164 19980915

AN 2000-271444 [23] WPIDS

AB WO 200015807 A UPAB: 20021105

NOVELTY - In vivo down-regulation of osteoprotegerin ligand (OPGL) activity in an animal, including a human, comprising presentation of at least one OPGL polypeptide or subsequence, and/or at least one OPGL analog

to the animal to induce an immune response, is new.

DETAILED DESCRIPTION - In vivo down-regulation of osteoprotegerin ligand (OPGL) activity in an animal, including a human, comprises effecting presentation to the animal's immune system of:

(a) at least one OPGL polypeptide or subsequence which has been formulated so that immunization of the animal with the OPGL polypeptide or subsequence induces production of antibodies against the OPGL polypeptide; and/or

(b) at least one OPGL analog where at least one modification in the OPGL amino acid sequence is introduced which has a result that immunization of the animal with the analog induces production of antibodies against the OPGL polypeptide.

INDEPENDENT CLAIMS are also included for the following:

(1) an OPGL analog which is derived from an animal OPGL polypeptide where a modification is introduced which has a result that immunization of the animal with the analog induces production of antibodies against the OPGL polypeptide;

(2) a nucleic acid fragment which encodes the OPGL analog of (1);

(3) a vector carrying the nucleic acid fragment of (2);

(4) a stable cell line which carries the vector of (3) expressing the nucleic acid fragment of (2) and which optionally secretes or carries the OPGL analog of (1);

(5) a method for the preparation of the cell in (4) comprising transforming a host cell with the nucleic acid fragment in (2) or the vector of (3);

(6) a method for the identification of a modified OPGL polypeptide which is capable of inducing antibodies against unmodified OPGL in an animal species where the unmodified OPGL polypeptide is a self-protein comprising:

(a) preparing, by peptide synthesis or genetic engineering techniques, a set of mutually distinct modified OPGL polypeptides where amino acids have been added to, inserted in, deleted from, or substituted into the amino acid sequence of an OPGL polypeptide of the animal species giving rise to amino acid sequences in the set which comprise T-cell epitopes which are foreign to the animal species, or preparing a set of nucleic acid fragments encoding the set of mutually distinct modified OPGL polypeptides;

(b) testing members of the set of modified OPGL polypeptides or nucleic acid fragments for their ability to induce production of antibodies by the animal species against the unmodified OPGL; and

(c) identifying and optionally isolating the member(s) of the set of modified OPGL polypeptides which significantly induces antibody production against unmodified OPGL in the species or identifying and optionally isolating the polypeptide expression products encoded by members of the set of nucleic acid fragments which significantly induces antibody production against unmodified OPGL in the animal species;

(7) a method for the preparation of an immunogenic composition comprising at least one modified OPGL polypeptide which is capable of inducing antibodies against unmodified OPGL in an animal species where the unmodified OPGL polypeptide is a self-protein comprising:

(a) preparing, by peptide synthesis or genetic engineering techniques, a set of mutually distinct modified OPGL polypeptides where amino acids have been added to, inserted in, deleted from, or substituted into the amino acid sequence of an OPGL polypeptide of the animal species giving rise to amino acid sequences in the set which comprise T-cell epitopes which are foreign to the animal;

(b) testing members of the set for their ability to induce production of antibodies by the animal species against the unmodified OPGL; and

(c) admixing the member(s) of the set which significantly induces antibody production in the animal species which are reactive with OPGL with a pharmaceutically and immunologically acceptable carrier and/or vehicle.

ACTIVITY - Osteopathic; immunostimulatory.

No biological data.

MECHANISM OF ACTION - Down-regulation of osteoprotegerin ligand (OPGL) activity.

USE - The method and polypeptide is useful for treating, preventing

and ameliorating osteoporosis or other diseases or conditions characterized by excessive bone resorption. The OPGL or subsequence is useful for down-regulating OPGL activity in an animal.
Dwg.0/0

L199 ANSWER 23 OF 23 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 1999-385609 [32] WPIDS
DOC. NO. CPI: C1999-113515
TITLE: TNF like proteins for treating autoimmunity and cancer.
DERWENT CLASS: B04 D16
INVENTOR(S): CHOI, Y; JOSIEN, R; STEINMAN, R; WON, B
PATENT ASSIGNEE(S): (UYRQ) UNIV ROCKEFELLER
COUNTRY COUNT: 20
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9929865	A2	19990617	(199932)*	EN	143 <--

RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: CA JP

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9929865	A2	WO 1998-US26486	19981214

PRIORITY APPLN. INFO: US 1998-989479 19981211; US 1997-989479 19971212; US 1998-34099 19980303
AN 1999-385609 [32] WPIDS
AB WO 9929865 A UPAB: 19990813
NOVELTY - Nucleic acids encoding human and murine TNF-related activation induced cytokines (TRANCE).
DETAILED DESCRIPTION - An isolated 1823 bp human TRANCE cDNA molecule (I) or degenerate variants or sequences that hybridise to the 1823 bp sequence under standard conditions.
INDEPENDENT CLAIMS are included:
(1) a nucleic acid molecule comprising 2237 bp murine TRANCE cDNA sequence (II) given in the specification or degenerate variants or fragments of this sequence, sequences that hybridise to the 2237 bp sequence under standard conditions;
(2) a detectably labeled isolated nucleic acid probe hybridizable (I) or (II);
(3) a polypeptide comprising the 247 amino acid human or 319 amino acid murine TRANCE sequences given in the specification (encoded by (I) and (II) respectively), or conservative variants, or fragments, or analogs or derivatives;
(4) an antibody having the polypeptide as in (3) as an immunogen;
(5) an expression vector comprising (I) or (II) operatively associated with a promoter;
(6) a unicellular host transformed with an expression vector as in (5);
(7) a method for modulating levels of expression of a TRANCE protein in a mammal, comprising:
(a) removing stem cell(s) from the mammal;
(b) destroying remaining hematopoietic stem cells in the mammal;
(c) transfecting the stem cell(s) with a vector comprising an nucleic acid molecule which encodes a TRANCE protein so that the nucleic acid molecule becomes incorporated into the genome of the hematopoletic stem cell, and
(d) introducing the transfected hematopoietic stem into the mammal so that the transfected hematopoietic stem cell can self replicate and differentiate within the mammal
(8) a method of diagnosing an immune system related condition in a mammal, comprising:

(a) removing a bodily sample from the mammal; and
(b) assaying the bodily sample to determine whether TRANCE is expressed in the bodily sample;
(9) a method for modulating immune response to an antigen in an animal, comprising:
(a) removing an immature **dendritic** cell from the animal;
(b) pulsing the immature **dendritic** cell from the animal with the antigen ex vivo, so that immature **dendritic** cells present the antigen on their surface;
(c) inducing maturation of immature **dendritic** cells ex vivo;
(d) pulsing the mature **dendritic** cells with a modulator of immune response ex vivo; and
(e) introducing the mature **dendritic** cells into the animal.
(10) a method for increasing viability of a **dendritic** cell of an animal in vivo, comprising the method as in (9) where the antigen is a TRANCE polypeptide and the **dendritic** cell does not necessarily present the TRANCE and the method does not necessarily occur ex vivo.
ACTIVITY - Immunomodulatory.
MECHANISM OF ACTION - Agonists and antagonists of TRANCE modulate immune response by increasing or decreasing the life span of mature **dendritic** cells and increasing or decreasing T cell activation (claimed).
USE - The human or murine TRANCE polypeptides or their variants, fragments, derivatives or analogues may be used as modulators of immune response in a mammal comprising, as can the antibodies as in (4), antisense sequences to (I) and (II) and **fusion** proteins comprising human and/or murine TRANCE. Agonists and antagonists of TRANCE, can be used to modulate immune response by increasing or decreasing the life span of mature **dendritic** cells and increasing or decreasing T cell activation.
These techniques are especially useful for treating immune system related conditions such as HIV, cancer, autoimmune disease or hypersensitivity to an allergen. The TRANCE polypeptides can be used to increase the viability of **dendritic** cells in vivo or in vitro, especially when used in conjunction with proteins of the tumor necrosis factor (TNF) superfamily (especially CD40L or TNF-alpha). The method in (10) may be used to increase an immune response of a animal to an antigen.
(All claimed)
Dwg.0/26